Atypical CNS and non CNS presentations of leprosy - A case series

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Introduction & Objectives: Atypical presentations of leprosy continue to baffle clinicians; hence it is necessary to keep a vigil for unusual manifestations of leprosy. The objectives of the present study were to describe atypical clinical presentations of leprosy involving unusual sites and atypical morphological presentations over a two-year period.

Materials & Methods: Clinical examination, nerve conduction study (NCS), histopathology and PCR testing for Mycobacterium leprae DNA was performed in 12 cases of leprosy with unusual presentation. In addition, brain and spinal cord MRI were taken in six patients with an abnormal neurological examination.

Results: Our case series attempts to describe the various eccentric presentations of leprosy. We further categorise them as Central nervous system (CNS) leprosy and Non-CNS Leprosy. The CNS leprosy category included six cases with MR abnormalities involving the brain and cervical cord. Non-CNS leprosy category included cases of leprous tenosynovitis with osteitis, type-1 lepra reaction causing phimosis, leprous lymphadenopathy, erythema multiforme like erythema nodosum leprosum, multiple nerve abscesses along the course of left medial antebrachial cutaneous nerve of forearm and a case of lepromatous leprosy with spontaneous ulceration. (Table 1)

Table 1-Summary of clinical, histological and imaging characteristics of study patients
**CNS presentations**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Cranial nerve involvement</th>
<th>Motor weakness/disability</th>
<th>Acute febrile reaction in nerve/sheath</th>
<th>Pathological diagnosis</th>
<th>MHB lesion (g)</th>
<th>Atypical presentation</th>
<th>Treatment provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>None</td>
<td>-</td>
<td>-</td>
<td>BTHD</td>
<td>SIA at level of C8-6</td>
<td>MDT-MBR with oral steroids</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>VII</td>
<td>Right sided facial palsy</td>
<td>-</td>
<td>BMHD</td>
<td>SIA C5-C6</td>
<td>MDT-MBR with oral steroids</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>VII</td>
<td>Left sided facial palsy</td>
<td>-</td>
<td>BMHD with T1, T5</td>
<td>SIA C5-C6</td>
<td>MDT-MBR with oral steroids</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>VII</td>
<td>Facial nerve (left facial palsy), left hand and foot clonus</td>
<td>0.10 Bacillary OIF</td>
<td>BMHD</td>
<td>Neuritis with prominent enhancement in bilateral hand and foot extending from C4-C7, SIA involving lower pons, left T12 nerve root, left and right median nerve sheath, SMA C2-C3</td>
<td>MDT-MBR with oral steroids</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>VII</td>
<td>Left facial palsy left hand and foot weakness</td>
<td>-</td>
<td>BMHD</td>
<td>SIA involving lower pons, left T12 nerve root, left and right median nerve sheath, SMA C2-C3</td>
<td>MDT-MBR with oral steroids</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>VII</td>
<td>Left facial palsy, left hand and foot weakness</td>
<td>&gt;1000 Bacillary OIF</td>
<td>BMHD</td>
<td>-</td>
<td>MDT-MBR with oral steroids</td>
<td></td>
</tr>
</tbody>
</table>

**NON CNS presentations**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>1+ BNG</th>
<th>BBHD</th>
<th>-</th>
<th>BTHD with T12 causing phrenic</th>
<th>MDT-MBR with oral steroids</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1+ BNG</td>
<td>BBHD</td>
<td>-</td>
<td>BTHD with sternocleidomastoid</td>
<td>MDT-MBR with oral steroids</td>
</tr>
<tr>
<td>8</td>
<td>1+ BNG</td>
<td>BBHD</td>
<td>-</td>
<td>T2HBD with cervical nerves</td>
<td>MDT-MBR with oral steroids</td>
</tr>
<tr>
<td>9</td>
<td>1+ BNG</td>
<td>BBHD</td>
<td>-</td>
<td>Lepraous</td>
<td>MDT-MBR with oral steroids</td>
</tr>
<tr>
<td>10</td>
<td>1+ BNG</td>
<td>BBHD</td>
<td>-</td>
<td>Lymphoedema</td>
<td>MDT-MBR with oral steroids</td>
</tr>
<tr>
<td>11</td>
<td>1+ BNG</td>
<td>BBHD</td>
<td>-</td>
<td>Lymphoma, Langerhans cell histiocytosis</td>
<td>MDT-MBR with oral steroids</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>BMHD</td>
<td>-</td>
<td>MBDH with left radial artery and ulnar nerve sheath, and left median nerve in forearm</td>
<td>MDT-MBR with oral steroids</td>
</tr>
</tbody>
</table>

**Abbreviations** - SRN-Superficial branch of radial nerve, OIF-Oil immersion field, BIG-Bacillary index of granuloma, BTHD-Borderline tuberculoid Hansens disease, BBHD-Mid-borderline Hansens disease, T1R-Type1 lepra reaction, LLHD-Lepromatous Hansens disease, SIA-signal intensity alteration, MDT-MBR-Multidrug therapy multibacillary regime

**Conclusion:** The current case series highlights the plethora of unusual presentations of leprosy, many of which remain scarcely reported in the literature. A knowledge of these presentations is required for clinicians to make a timely diagnosis and prevent the debilitating sequelae of this disease.
Abstract N°: 97

Cutaneous leishmaniasis in Republic of Yemen

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Introduction & Objectives:

Cutaneous leishmaniasis is parasitic disease transmitted by the bite of an infected female phlebotomine sand-fly. Sandflies are noiseless fliers that rest in moist, dark places and are typically most active in evening and nighttime hours. Other modes of transmission are congenital and parenteral (blood transfusion, needle sharing, and laboratory accident).

Objective The objective of the study was to identify the pattern of acute and chronic skin Disease.

Materials & Methods:

30 Yemeni males and females patients 2- 40 years old.

The presentation of cutaneous disease varies depending on the stage of disease, although it mainly occurs in 2 forms, (1) an oriental sore caused by L tropica and (2) American cutaneous leishmaniasis caused by L brasiliensis. Lesions are usually found in exposed areas (eg, face, arms, legs). The skin lesion begins as a nontender, firm, red papule several centimeters in size at the site of the sandfly bite. In time, the lesion becomes darker, widens with central ulceration serous crusting, and granuloma formation. The border often has a raised erythematous rim known as the volcano sign. Investigations Skin slit and scraping stained with Geimsa stain showed amastigotes Donovani bodies. Skin biopsy and histopathological findings showed inflammatory granuloma with intracellular leishmanial bodies. All the thirty patients treated with antimonial drugs injection.

Results:

The clinical data and the investigations showed that all the patients
had cutaneous leishmaniasis.

**Conclusion:**

Cutaneous leishmaniasis is very common skin disease in republic of Yemen. It is endemic in some areas or regions. The local names of cutaneous leishmaniasis in Yemen are Othrah, shoknofah, Ebadah and oofeiah. No mucocutaneous leishmaniasis or post kala azar syndrome.
Cutaneous aspergillosis as the first manifestation of the disseminated disease

Thais Ragazzo, John Verrinder Veasey, Lyvia Salem, Carolina Contin, Rute Lellis, Silvia Soutto Mayor

Introduction & Objectives:

Primary cutaneous aspergillosis is a rare and severe invasive fungal infection where the fungus is inoculated into the skin and progresses with systemic dissemination. Most frequently found in immunocompromised individuals, its incidence has been rising. Early diagnosis and treatment prevent disease dissemination.

Materials & Methods:

We report the case of a four-year-old girl with acute lymphocytic leukemia who, at a venous puncture site on the back of her left hand, presented with a 1.0 cm circular blister with a blackened central depression surrounded by a painful, hardened erythematous area. Following hospital admission with febrile neutropenia, aspiration was performed with fluid aspiration and skin biopsy from the blister, with the tissue sample having been sent for culturing and anatomical and pathological assessment. Histopathological examination revealed septate hyaline hyphae within hypodermal vessels. *Aspergillus* sp. was found to grow in the fungal culture of both materials collected. CT scans showed sinus involvement and pulmonary invasion suggestive of disseminated aspergillosis. The patient was treated with lesion exeresis associated with liposomal amphotericin B and voriconazole, but she died a few days thereafter.

Results:

Systemic hyaline filamentous fungal infections (hyalohyphomycoses) present with high morbidity and mortality in immunocompromised patients. They usually occur by inhalation of the agent causing respiratory tract infections and secondary cutaneous involvement through hematogenic route. Skin lesions are thus disseminated, with or without the presence of central necrosis. Primary skin lesions occur by direct inoculation at venous access sites, catheters, trauma, and burns, and appear as a single macule, papule, or nodule, which can be red or violet with the presence of hemorrhage or central necrosis. *Aspergillus* sp. can be caused by several agents, among which are the genera *Fusarium* sp., *Scedosporium* sp., *Acremonium* sp., *Trichoderma* sp., and *Aspergillus* sp., as identified herein. Diagnosis is based on histopathological findings, with the visualization of hyaline septate hyphae forming branches at 45°. Isolating the agent from the tissue culture is crucial in determining its etiology. The drug of choice for treating invasive aspergillosis is voriconazole, which yields superior results when compared to amphotericin B2. As with pheohyphomycoses, surgical excision or debridement is an integral part of management and is aimed both at diagnostic and therapeutic purposes.

Conclusion:

Immunocompromised patients are susceptible to several opportunistic infections, among them hyalohyphomycosis by *Aspergillus* sp. Skin may be the first site to manifest signs of the disseminated disease, in addition to being the primary site of infection. There is a need for early recognizing this type of infection, as well as early diagnosis and treatment in order to achieve a better outcome.
Abstract N°: 114

**An open label, single arm, pilot study to evaluate the safety, tolerability, and efficacy of daily fluconazole 150 mg in subjects suffering from Tinea cruris and Tinea corporis**

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¹La’ Mer Clinic, Mumbai, India

**Introduction & Objectives:** Dermatophytosis has reached epidemic proportions, with the current reported prevalence in India (owing to its tropical climate) in the range 6.09%–61.5%. Hence to curb this epidemic the drug of choice should be effective, safe & most importantly affordable to masses. Objective is to study the clinical efficacy of fluconazole as a monotherapy in the treatment of tinea cruris and corporis.

**Materials & Methods:** The current study was an prospective, open label, single-center, non-comparative study conducted at La’Mer. We included adult subjects with uncomplicated dermatophytosis confirmed by microscopic examination of skin scrapings. Pregnancy, poor renal function, and recent exposure to anti-fungal therapy were exclusion criteria. Patients were reviewed on days 14, 28 and 56. We scored the severity of erythema, scaling, and pruritus on a four-point scale: absent, mild, moderate, and severe. Of 107 subjects screened, 100 were finally included in the study. Eleven were lost to follow up and one subject withdrew consent.

**Results:** In our study, we had the following findings:

1. At 5 weeks (Day 56), 98%, 100%, and 97% of patients had no scaling, erythema, and pruritus, respectively. Skin scrapings showed 100% mycological cure.
2. Fluconazole 150 mg daily for eight weeks effectively treats dermatophytosis.
3. This regimen is safe and well-tolerated even in patients with co-morbidities.

Most common factor responsible for discontinuation of therapy was partial relief which was mistaken as cure by the patient. Significant Clinical & mycological cure rate at 2, 6, and 12 weeks were observed.

**Conclusion:** Tab Fluconazole 150 mg once in daily dosing is an effective and safe treatment for tinea cruris and corporis. Improving the patient’s compliance and treatment adherence enhances the rate of clinical as well as mycological cure and avoids recurrences.
First report of chromoblastomycosis caused by Phialophora expanda with CARD9 mutation and related basic research

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Introduction & Objectives:

Dematiaceous fungi, also known as phaeohyphomycetes or melanized fungi, are so named owing to the dark pigmentation in the walls of their hyphae and/or spores. They are associated with various clinical manifestations, mainly chromoblastomycosis and phaeohyphomycosis. Histologically, chromoblastomycosis is characterized by the presence of sclerotic or muriform cells, while phaeohyphomycosis is characterized by yeast-like, pseudo-filamentous, or filamentous components in tissue.

In this study we report, for the first time, a patient harboring the CARD9 mutation with chromoblastomycosis caused by Phialophora expanda. We designed a series of in vivo and in vitro studies to compare this case with our former patient suffering from phaeohyphomycosis caused by Phialophora americana from the same complex. We preliminarily demonstrated that besides host defense, fungal specificity also contributed to the clinical phenotype in patients with dematiaceous fungal infections.

Materials & Methods:

1. Ethics
2. Pathogen DNA extraction, amplification, and sequencing
3. Isolation of human peripheral blood mononuclear cells
4. Peripheral blood mononuclear cells stimulation assays
5. Cytokine measurements and intracellular cytokine staining of CD4+ T cells
6. RNA-sequencing (RNA-seq) analyses and immunohistochemical analysis
7. Murine model of subcutaneous dematiaceous fungal infection
8. In vitro induction of muriform cells
9. Statistical analysis

Results:

1. Similar clinical findings in two CARD9-deficient patients with chromoblastomycosis and phaeohyphomycosis
2. **CARD9** mutation compromised cytokine production and adaptive immune responses in PBMCs from both patients
3. Comparative transcriptome sequencing revealed different local immune responses in these patients
Conclusion:

We report the case of a patient with chromoblastomycosis harboring a CARD9 mutation. This is, to our knowledge, the first report that links chromoblastomycosis to CARD9 mutation, which challenge our previous perspective that chromoblastomycosis patients are mostly immunocompetent. We showed that, besides host immune responses, fungal specificity is also closely involved in shifting the clinical phenotype in CARD9 deficient patients with dematiaceous fungal infections. We expect that this study will be helpful for clinicians and will call for additional efforts to systematically study these uncommon, frequently refractory infections and their underlying genetic background.
Abstract N°: 178

Erythema Nodosum Leprosum Mimicking Lucio’s Phenomenon: A Case Report of Diagnostic Dilemma

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Erythema Nodosum Leprosum Mimicking Lucio’s Phenomenon: A Case Report of Diagnostic Dilemma

Introduction & Objectives:

Leprosy is a chronic granulomatous infectious disease caused by *Mycobacterium leprae*. This condition is also associated with multiple episodes of inflammation, called leprosy reactions. Erythema nodosum leprosum (ENL) is one of leprosy reactions characterized by erythematous papules or nodules and rarely manifests as ulcerations. However, purpuric lesions leading to necrotizing cutaneous lesions may also occur as lucio’s phenomenon (LP).

Materials & Methods:

A 73-year-old male was referred from internal medicine department due to the appearance of necrotic lesions on both inferior extremities 3 days prior. Lesions appeared purpuric 10 days prior, which later transformed into blister and necrotic lesions. He experienced numbness in both hands. There were no history of visible nodular lesions. History of leprosy treatment was denied. Physical examination found vital signs within normal limits. Dermatological examination showed madarosis and multiple purpuric, bullae, and necrotic lesions on all extremities. Sensory examination revealed hypoesthesia on both hands. A slit skin smear showed bacteriological index of +4.3 and morphological index of 36.7%. Based on these findings, the patient was diagnosed multibacillary leprosy with LP and skin biopsy was performed. The histologic findings revealed lepromatous leprosy (LL) with ENL reaction.

Results:

Leprosy reaction is an acute inflammation episode resulting from an immune response against *M. leprae*. ENL usually occurs during the course of antileprosy treatment in LL patients. The typical manifestation of ENL lesions is tender papules, nodules, or plaques and may present as subcutaneous lesions which are invisible. Lesions of ENL may become vesicular, bullous, necrotic, ulceration called necrotizing ENL and may resemble LP, characterized by erythematous plaques transform into purpuric, necrotic, and eschar formation. Other features of LP are the absence of papules or nodular lesions, and occurs in untreated patients. ENL and LP are diagnosed clinically, but the clinical symptoms may vary from patient to patient. Under the circumstances, a histopathology examination can help establish the diagnosis. ENL lesions show neutrophils, eosinophils, aggregates of foamy macrophages infiltrate in dermis or subcutis, vasculitis, panniculitis, and granular bacilli. The characteristic histologic of LP are cutaneous or subcutis necrotizing vasculitis, vascular occlusion, bacilli in endothelial cells or blood vessels, dermal and or subcutis infiltrate of neutrophils, eosinophils, and lymphocytes.

Conclusions:

The diagnosis of leprosy reaction should be made based on proper history, clinical findings and can be confirmed with histopathology testing. Dermatologist should be aware of unique clinical manifestation of leprosy reactions, which may recur in the future.
Abstract N°: 217

role of cbnaat in the rapid diagnosis of cutaneous tuberculosis and rifampicin resistance

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Introduction & Objectives:

Cutaneous tuberculosis (TB) accounts for 0.14% patients attending dermatology OPDs. Diagnosis is mainly based on clinical evidence with corroborative histopathology findings. Owing to the paucibacillary nature of lesions isolation of mycobacteria has remained a problem. This study was conducted to evaluate the role of CBNAAT in rapid diagnosis of cutaneous tuberculosis and rifampicin resistance.

Materials & Methods:

This observational study included 24 patients. A detailed history and clinical examination were followed by haematological and radiological investigations. Biopsy samples were sent for histopathology, culture and CBNAAT. The presence of Mycobacterium tuberculosis (MTB) and rifampicin sensitivity was noted.

Results:

The different patterns of cutaneous TB seen in our study was lupus vulgaris (n=12), scrofuloderma (n=2), TB gumma (n=2), erythema induratum of bazin (EIB) (n=3), lichen scrofulosorum (n=2), papulonecrotic tuberculid (n=2) and erythema nodosum (n=1). Most common clinical presentation was plaques (33.3%), nodules (33.3%), ulcer (20.9%), papules (8.3%), and sinus (4.2%) in that order. Systemic focus of tuberculosis was seen in 5 patients. Histopathological corroboration was found in 21 (83.3%) patients. CBNAAT was positive in 1 (4.2%) patient with indeterminate resistance.

Conclusion:

Most commonly cutaneous TB is diagnosed clinically and histopathological findings give supportive evidence. However, CBNAAT of skin biopsy was not found to have much role in diagnosis of cutaneous TB.
Abstract N°: 220

Primary cutaneous actinomycosis – an intriguing case

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Introduction & Objectives:

Actinomycosis is a chronic suppurative granulomatous infection due to anaerobic actinomycoses.

Materials & Methods:

A 55-year-old male presented with multiple slowly growing asymptomatic reddish raised lesions with few pus filled lesions of five years duration over his lower back and buttocks. There was past history of trauma before initiation of lesion development. He was known case of diabetes on irregular treatment.

On mucocutaneous examination there were multiple discrete erythematous papules, pustules, nodules of variable size present over lower back, b/l gluteal region & posterior surface of upper thigh. There were multiple sinuses oozing whitish seropurulent discharge with few white colored granules along with puckered scars. Gram staining of crushed smear of these granules showed gram positive filamentous organisms and neutrophils. Potassium hydroxide and modified ziehl-neelsen stain were negative. Histopathology revealed subepidermal pustules, diffuse inflammatory infiltrate in dermis with a sulphur granule showing splendore-hoepli phenomenon in subcutaneous plane. Gram staining showed gram positive filamentous bacteria showing acute angle branching. It was also positive for PAS and gomori methamine silver stain which was suggestive of Actinomyces israeli. However cultures did not reveal any growth. Patient was finally diagnosed as a case of primary cutaneous actinomycosis and was started on Amoxicillin (along with clavulanic acid) 625mg three times in a day. Follow up after 1 month of starting the therapy revealed significant improvement.

Results:

Primary cutaneous actinomycosis is a rare case, diagnosis relying on microscopy often even repeat cultures tend to be worthless.

Conclusion:

Diagnosis of actinomycosis requires a high index of suspicion. Also the site involved in our study was very rare.
Abstract N°: 418

Insight into leprosy reactions. What is new?

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Introduction & Objectives:
Leprosy reactions are inflammatory episodes during infection with *M. leprae* and/or *M. lepromatosis*. Most of the damage caused by leprosy is contributed to these episodes. There are 3 reactions described. Nerve damage with loss of sensation, muscle strength, and diminished autonomic functions seems to be correlated to Type 1 and Type 2 leprosy reactions (T1R and T2R). Old names Reversal Reaction and Erythema Nodosum Leprosum. Lucio’s phenomenon, first described in Mexico, gives no nerve damage only in the “stars”.

Materials & Methods:
This is a teaching session, based on 50 years of experience.

Results:
In the 1970th most of the basic understanding of the immunopathology of T1R was elucidated in Ethiopia. The treatment was established, both medical and surgical, and methods for follow-up, Voluntary Muscle Testing, and Graded Sensory Testing (Now called: Semmes Weinstein).
In the years thereafter only fine-tuning of knowledge on the pathophysiology, particularly the immunology occurred, in line with the increase in knowledge of general immunology, genetics, transcriptomics, and proteomics.
The treatment, immunosuppression, which should start as quickly as possible, had a setback after WHO and its advisors shortened the duration. To date, thanks to experienced clinicians the antigen load (classification) determines the duration again. The follow-up was enriched with improved serology (anti-PGL-1) but endangered again by the discouragement of skin smears. PCR was introduced. Clinical skills for follow-up disappeared, particularly nerve palpation, but Echo Doppler could replace it. Recently it was found that a transcriptomic signature consisting of 5 messenger RNA genes was present two weeks before the onset of a T1R.
The understanding of T2R took more time. It was understood that it was an immune-complex disease, not in the vessel wall but in the tissues, and that Cell-mediated immunity (CMI) was involved as well. The treatment with thalidomide was already introduced in the 1960th. But soon estradiol. Only after 1998, did it become accepted again, still used in Brazil. At present, its use is allowed in more countries, because prednisolone treatment has had a disastrous effect. The use of clofazimine and methotrexate may improve the treatment further. The follow-up is the same as in T1R.
For Lucio’s phenomenon, it was discovered that particularly *M. lepromatosis* was involved and that the obstruction by the bacilli of postcapillary venules was the cause of infarction. The treatment is an effective Multi Drug Treatment containing at least a highly effective drug like Rifampicin.

Conclusion:
Theoretical knowledge over the 50 years has increased, but the patient has hardly benefited.
Eczema herpeticum over Hailey-Hailey disease lesions: a case report.

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Introduction & Objectives:

Hailey-Hailey disease (HHD), is a rare, benign, autosomal dominant cutaneous disorder that causes a painful rash and blistering commonly occurring in the intertriginous folds. Despite having a good prognosis, there is no cure for HHD and the disease can be quite debilitating to the quality of life. The complexity of HHD can be compounded by superimposed eczema herpeticum (EH), which is caused by a herpes viral infection occurring in preexistent cutaneous conditions.

Materials & Methods:

We present a unique clinical presentation of HHD with superimposed EH caused by herpes simplex virus type 1 (HSV-1) infection and a review of the literature of the coexistence of those conditions.

Results:

A 58-year-old female patient with a past medical history of recalcitrant HHD for seven years presented for evaluation of intractable pain secondary to cutaneous lesions. She was being treated with acitretin 15mg/day and mometasone 1% alternating with tacrolimus 0.1% topically in the areas of exacerbation of lesions.

Physical examination revealed painful erosions and plaques with whitish exudative areas and clustered vesicles in the inguinal, axillary, submammary and abdominal folds. A burning sensation, followed by high fever (39ºC) and significant pain which restricted her mobility for about two days was also reported.

Exudated cultures and PCRs for herpes virus complex were taken. HSV-1 infection was detected, so we diagnosed the patient as EH superimposed on HHD. The lesions were topically superinfected by *streptococcus agalactiae*.

The abnormal laboratory test results included an elevated total white blood cell count of 13.310 cells/mm3 with 10.910 neutrophiles/mm3 and elevation of C-reactive protein up to 60 mg/l. Other investigations, including chest x-ray and blood test with serology, were within the normal limits.

The patient was treated by acyclovir 1g/8h and amoxicillin/clavulanic 875/125mg/8h for 10 days and zinc sulfate fomentations 1:1000 followed by topical fusidic acid every 12 hours.

After these treatments, complete remission of the herpetic condition and a slight improvement of her HHD lesions were noted.

Conclusion:

EH is a potentially life-threatening viral infection that arises in pre-existing skin conditions. Disruption of the stratum corneum secondary to skin disease is the most common predisposing factor. There have been reports of EH occurring in atopic dermatitis and others cutaneous diseases.

HSV infection concomitant HDD is very rare and often difficult to differentiate. Only seven cases have been
published in literature so far (table 1). There should be high suspicion of secondary infection, specially by HSV, when the patients start with fever, intractable pain and clustered vesicles in intertriginous areas. Early diagnosis and treatment are highly suggested for EH to avoid fatal complications. The early use of both antiviral drugs and antibiotics is extremely important and should not be delayed pending laboratory tests.

The initial treatment is generally with high-dose intravenous acyclovir, which is the most widely studied and used drug for treating EH. The antibiotic therapy is tailored to the organism found on culture, and this is most commonly *Staphylococcus* and *Streptococcus* species. When a bacterial infection is not present, the patients should be given a topical antibiotic cream for prevention.

**Tables**

Table 1. Eczema herpeticum with Hailey-Hailey Disease: review of the literature.

<table>
<thead>
<tr>
<th>Case</th>
<th>Author/year</th>
<th>Gender/age</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Otsuka et al./1981</td>
<td>M/41</td>
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<tr>
<td>2</td>
<td>Zaim et al./1987</td>
<td>M/49</td>
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<tr>
<td>3</td>
<td>Flint et al./1993</td>
<td>M/40</td>
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<td>4</td>
<td>Schirren et al./1995</td>
<td>M/49</td>
</tr>
<tr>
<td>5</td>
<td>Lee et al./2009</td>
<td>M/47</td>
</tr>
<tr>
<td>6</td>
<td>de Aquino paulo Filho et al./2014</td>
<td>M/38</td>
</tr>
<tr>
<td>7</td>
<td>Chint et al./2019</td>
<td>F/71</td>
</tr>
<tr>
<td>8</td>
<td>Morón et al./2023</td>
<td>F/58</td>
</tr>
</tbody>
</table>
Abstract N°: 491

**Sleep quality in patients with scabies**

Ece Altun¹

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**Introduction & Objectives:** Scabies is a common parasitic skin disease presenting with severe itching. Itching increases at night and may cause sleep disorders. This study was conducted to evaluate sleep quality in people with scabies using the Pittsburg Sleep Quality Index (PSQI) and determine factors affecting sleep quality.

**Materials & Methods:** This study was conducted between April and October 2022 at the dermatology outpatient clinic of Medipol Mega University Hospital by administering a face-to-face questionnaire to 48 patients with scabies and 47 controls. The PSQI was used to determine whether the participants in the study had sleep disorders. The global PSQI score ranges from 0 to 21, with high values indicating poor sleep quality and high level of sleep disorders. Individuals with a total PSQI score of \( \geq 5 \) are considered to have poor sleep quality, and those with a total score of <5 are accepted to have good sleep quality.

**Results:** A total of 48 patients, 17 (35.4%) women and 31 (64.6%) men, with a mean age of 25.5 (18-52) years were included in the scabies patient group, and 47 healthy individuals, 15 (31.9%) women and 32 (68.1%) men, with a mean age of 26 (18-48) years in the control group. The median disease duration of the patients with scabies was 2 (1-6) months. Of the patients, 29.2% had received treatment before, and 66.7% had another family member with itching. The most frequently affected areas were the hands (100.0%), arms (95.8%), and abdomen (95.8%), and the least affected area was the feet (16.7%). The mean total PSQI was 12 (1-16) in the scabies group and 2 (0-7) in the control group. Poor sleep quality was found in 97.9% of the patients in the scabies group and 12.8% of the controls. The total PSQI and poor sleep quality were found to be statistically significantly higher in the scabies group than in the control group (\( p < 0.001 \)). When the groups were compared in terms of the PSQI components, there was a statistically significant difference in all the components (\( p < 0.001 \)), except the use of sleep medication (\( p = 1.0 \)). In the scabies group, no statistically significant difference was found in sleep quality according to the patients’ gender, education level, previous treatments, and areas of involvement (\( p > 0.05 \)).

**Conclusion:** Sleep quality was determined to be lower in people with scabies than in healthy controls. Itching at night causes both poor sleep quality and daytime dysfunction.
Abstract N°: 497

CB-NAAT: Its clinical utility in diagnosing cases of cutaneous tuberculosis and assessing rifampicin resistance

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Introduction & Objectives:

Cutaneous TB (CTB) accounts for <1%- 2% of all cases of Tuberculosis(TB). Diagnosis of cutaneous tuberculosis is challenging, apart from high degree of suspicion more than one technique is necessary for the diagnosis. The sensitivity of the conventional diagnostic methods is low. Smear microscopy for acid fast bacilli has low and has variable sensitivity (10.3-18.4%), studies show recovery rate of culture from 7% to 60% in CTB cases, time 2-8 weeks and histopathological examination has sensitivity of 64 to 91.8% across various studies.** Our objectives were** to assess and compare the efficacy of CB-NAAT (cartridge based nucleic acid amplification test) with culture and histopathological examination in diagnosing cases of cutaneous TB, also assessment and comparison of rifampicin resistance results shown by CB-NAAT and drug sensitivity testing (DST).

Materials & Methods:

It was cross sectional observational study on patients with cutaneous TB. Skin biopsy specimen for histopathology examination (hematoxylin and eosin, AFB staining), TB culture (Liquid culture-DST) and CB-NAAT (gene Xpert MTB/RIF) was sent for each patients along with other relevant investigations. Culture positive cases were subjected to DST. Results were recorded and standard histopathological criterias were used for histopathological diagnosis.

Results: Total 41 cases of skin tuberculosis were included in the study. Mean age of patients were 27 years and mean duration of illness was 2.8 years most common variant was lupus vulgaris in 25 (60.09%) patients followed by scrofuloderma in nine (21.9%). Systemic tubercular involvement was seen in 14.63% patients, with disseminated TB in one. CB-NAAT was positive in 6 (14.6%) patients, culture in 8 (19.5%) and histopathology was compatible in 26 (63.4%) patients. Out of 8 culture positive cases 3 were also CB-NAAT positive, the sensitivity and specificity of gene Xpert MTB/RIF in detecting TB as compared to culture was 37.5% and 91%** respectively. Among 26 histopathology compatible cases 4 were also CB-NAAT positive, sensitivity and specificity of gene Xpert MTB/RIF in detecting TB was 15.38% and 86.66%** respectively as compared to histopathology. Three out of 6 CB-NAAT patients showed rifampicin resistance out of which one was confirmed on DST and rest two were culture negative.

Conclusion: Utility of CB-NAAT for Extra Pulmonary TB (lymph node tissues or aspirates, in cerebrospinal fluid, in pleural fluid etc) has been shown in studies. There is lack of data regarding CB-NAAT in CTB. Tough CB-NAAT is a rapid test, has additional advantage of detecting rifampicin resistance, paucibacillary nature of CTB limits its utility. In this series CB-NAAT done in skin tissue picked up 14.6 % of cases of CTB, while culture and histopathology picked up 19.5%, 63.4 % cases respectively. There were cases picked up only by CB-NAAT, while other two investigations being negative. Therefore Combining more than one test is helpful in reaching the diagnosis in CTB and CB-NAAT along with culture -DST helps us in detecting drug resistance at the earliest which in now not uncommonly seen in cases of CTB.
Abstract N°: 566

Be aware of a neglected disease: Leprosy.

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Introduction & Objectives:

In Europe, patients are still diagnosed with leprosy (Hansen’s Disease (HD)), unfortunately often after long doctors’ delays, and consequently are handicapped for life. The WHO is partly to blame, for the claim in 2005 that leprosy was no longer a public health problem. Which was interpreted by most that there was no leprosy anymore.

In the medical curriculum, very little attention is being paid to leprosy, and thereafter, it is forgotten altogether and not in the differential diagnosis. Just due to a lack of awareness.

Materials & Methods:

Leprosy (HD) should be considered in all patients with skin lesions not responding to treatment, especially when they also have neurological deficits, and live or have lived in leprosy-endemic countries. Due to the increase in global travel and migration, doctors in low-endemic areas and in so-called ‘developed countries need to consider leprosy (HD) as a possible diagnosis.

Results:

A patient with leprosy may present with hypopigmented or erythematous macules, with nodules or plaques which are skin coloured, slightly red, or even hyperpigmented in dark skin. Patients may even have no visible lesions.

The patient may complain of loss of sensation in the skin lesions or of hands or feet. He or she may have aches and pains in the face or the limbs or mention a numb, sleepy, or ‘dead’ sensation in the affected areas, like ‘ants running under the skin’.

In these patients, the differential diagnosis should include leprosy, especially in patients coming from endemic areas, as well as patients with pityriasis alba, vitiligo, autoimmune diseases, neurofibromatosis, lymphoma, diabetes, and even bullous diseases. Leprosy is in over 80% of patients easy to diagnose provided there is awareness.

Conclusion:

How to diagnose leprosy:

When examining the patient 2 out of 3 of the following criteria make the diagnosis certain.

\1. Loss of sensation in a skin lesion.
\2. An enlarged peripheral nerve.
\3. Positive skin smears.

Occasionally, it is not possible to classify leprosy according to the Ridley and Jopling classification. In such cases, the lesions are clinically and histologically referred to as indeterminate; meanwhile, a further 1%–10% of the
patients may also have pure neural leprosy: leprosy without skin signs.

Treatment is WHO Multi Drug treatment. When this is started in time, patients may not have any problems during treatment.
Abstract N°: 608

Type II Leprosy Reaction Erythema Nodosum Erythema Multiforme-Like - A Rare Presentation

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Introduction & Objectives:

We present a rare case of a 17-year-old female patient with a simultaneous presentation of two different variants of Type II leprosy reaction: Erythema nodosum leprosum (ENL) and erythema polymorphous reaction (EPLR). The objective of this report is to highlight this unique case and emphasize the importance of recognizing the diverse clinical manifestations of leprosy reactions.

Materials & Methods:

A detailed clinical examination was performed on the patient, including a thorough medical history and physical examination. Laboratory tests were conducted to assess inflammatory markers and leukocyte count. Additionally, abdominal CT scan was performed to evaluate lymph node enlargement. A skin biopsy was obtained for histopathological examination, which included evaluation of inflammatory infiltrate, granulomas, and presence of bacilli.

Results:

The patient presented with fever, nocturnal diaphoresis, and the subsequent development of erythematous-violaceous spots on the lower limbs, along with other associated symptoms. Laboratory tests revealed increased inflammatory markers and leukocytosis. Abdominal CT scan confirmed bilateral inguinal lymph node enlargement. Histopathological examination of the skin biopsy showed evidence of inflammatory infiltrate with granulomas and panniculitis, along with the presence of bacilli in globia in the Fite-Faraco coloring.

Conclusion:

In this rare case, a 17-year-old female patient exhibited a simultaneous presentation of two different variants of Type II leprosy reaction: ENL and EPLR. The clinical lesions were consistent with EPLR, while the histopathological findings suggested the presence of ENL. This unique case underscores the importance of considering diverse clinical presentations of leprosy reactions and highlights the need for early recognition and appropriate treatment. Dermatologists should be aware of these atypical presentations to facilitate accurate diagnosis and management of leprosy reactions.
Abstract N°: 658

Evaluation of combined itraconazole and terbinafine in the treatment of recalcitrant cases of tinea corporis.

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Introduction & Objectives:

During the last few years, there was increased incidence of resistance of superficial fungal infections, more specifically tinea corporis to the conventional therapy either terbinafin or itraconazole as a single systemic therapy. In this case series, we tried a combination of the two drugs in the treatment of such resistant cases and evaluated both clinical and mycological response.

Materials & Methods:

A total of 10 patients were enrolled in this study. All patients showed failure of response to either itraconazole (6 patients) or terbinafin (4 patients). After confirmation of the diagnosis with skin biopsy and histological examination supported by special stains (PAS and GMS), mycology culture was performed to identify the causative species. Routine investigations were performed to exclude any underlying systemic diseases. All patients were treated with a combination of itraconazole (200 mg daily dose) and terbinafin (250mg daily dose) for 2 weeks, increased to a maximum of 4 weeks in poorly responded cases. Therapeutic response was not evaluated only by clinical response, but also with pathological (skin biopsy) and mycological cure (KOH smear).

Results:

The study included 7 females (70%) and 3 males (30%) ranged from 23 to 46 years (average 31 years). In 8 patients (80%), the lesions were distributed on the trunk and lower extremities, while in 2 patients (20%), the lesions were localized to the abdominal, crural and gluteal regions. Laboratory investigations showed no significant abnormality. Mycology culture showed trichophyton rubrum in all cases. Out of 10, 6 patients (60%) showed clinical, pathological and mycology (complete) response at the end of treatment course for 2 weeks (group A). Four patients showed only clinical response but not pathological or mycological response and they continue treatment for other 2 weeks (group B). Other 3 cases showed complete response but still one case showed only clinical response. Follow up of the responded cases for 3 months showed relapse in 3 cases from group A (50%) but no recorded cases from group B.

Conclusion:

Resistance of fungal infections to conventional therapy formed a challenging issue after the pandemic era of Covid-19 infections. Up till now, there was no clear explanation for this new mutation. Our clinical trial showed the efficacy of combined therapy with itraconazole and terbinafine in the treatment of such cases but with a recommendation to increase the duration of treatment from 2 to 4 weeks to minimize the relapse rate. We hope this study alarm for new therapeutic strategies in such challenging cases.
Lupus vulgaris revealing sequelae of pulmonary tuberculosis: a case report

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Lupus vulgaris revealing sequelae of pulmonary tuberculosis: a case report

Introduction & Objectives:
Cutaneous tuberculosis (CT) is uncommon and represents less than 2% of the extrapulmonary localizations. It has a wide variety of clinical presentations depending on the mode of invasion of the skin by *M. tuberculosis* and the immunity of the host. The purpose of this observation is to shed light on this infectious dermatosis which remains little known, especially in developed countries.

Materials & Methods:
Herein we report the case of a lupus vulgaris revealing sequelae of pulmonary tuberculosis.

Results:
A 71-year-old male, native and living in Algeria, with history of chronic hepatitis B, presented to our department with asymptomatic plaques located on the trunk and limbs, evolving since 2001. At physical examination, the patient had four red-brown squamous plaques with atrophic center and polycyclic papular borders. The lesions showed an “apple-jelly” color on diascopy. They were about ten centimeters of major axis and were located on the right scapula, the left shoulder and the left knee. A skin biopsy of the lesions showed the presence of non-specific epithelioid granulomas without associated necrosis. Tuberculin skin test (TST) was positive. Culture of skin biopsy on Lowenstein-Jensen medium identified a mycobacterium of the *tuberculosis* complex. The diagnosis of CT in the form of lupus vulgaris was made. A chest X-ray performed to search for a pulmonary involvement showed parenchymal scarring with bilateral pleural thickening and paracicatricial emphysema. The patient was then referred to pneumology for further exploration and initiation of anti-tuberculosis treatment.

Conclusion:
Lupus vulgaris is the most common form of CT which occurs in previously sensitized individuals with a strong cell-mediated immunity against *M. tuberculosis*. Women are affected 2 to 3 times more often than men. The elementary lesion is represented by a red-brown nodule which later forms larger scaly or smooth plaques by centrifugal enlargement with serpigenous edges and central scarring. The face, neck and ears are the most commonly affected sites. The chronic course of the disease is characteristic. The diagnosis of lupus vulgaris is often made on the basis of a combination of clinical and paraclinical findings, especially histopathology, which shows tuberculoid granulomas without necrosis and TST, which is often positive. The PCR is useful in case of negativity of the bacteriological direct examination. Usually no subclinical tuberculous focus is associated. However, some authors have described cases in which the skin involvement was indicative of subclinical pulmonary tuberculosis, as in our observation. Hence, the importance of a systematic dissemination assessment in order to properly adapt the therapeutic management. To conclude, this case is being reported because of its
extreme chronicity of almost 20 years duration, the multiplicity of lesions and their uncommon locations.
Abstract N°: 848

Pediculid: an unusual Id reaction to pediculosis

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Introduction:

Id reaction or autosensitization dermatitis is an acute generalized skin eruption that occurs distantly from the original lesion. Id reaction to pediculosis capitis is rarely presented.

Materials & Methods:

A 32-year-old female with no medical history, presented for a generalized pruritic skin eruption of ten days duration having started at the nucha and then extended to the rest of the integument. The patient had not been taking any medication and there was no history of atopy or autoimmunity. Skin examination revealed multiple diffuse polymorphic lesions throughout the integument, combining erythematous-vesicular eczematous plaques, excoriated pseudo-urticarial papular lesions and scratch marks. The examination of the skin appendages revealed a massive infestation of the hair with live pearly white nits associated with dozens of mobile lice. The diagnosis of pediculosis capitis with id reaction was suspected. Histopathologic examination of skin lesions showed an important spongiosis, necrosis of keratinocytes and inflammatory infiltrate rich in polynuclear eosinophils in the dermis. Based on the clinical history, skin presentation and pathology findings, the patient was diagnosed with id reaction to pediculosis capitis. An anti-lice treatment based on dimeticone has been prescribed associated with short-term systemic corticosteroid therapy of 0.5mg/kg/day equivalent prednisone. At follow-up two weeks later, the patients’ evolution was favorable with post-inflammatory hyperpigmented lesions.

Id reaction or autoeczematization is an acute generalized skin eruption that occurs distantly from the primary site of inflammation or infection. It is thought to be an immunological reaction. The release of cytokines from keratinocytes due to external stimuli such as infections causes autosensitization and secondary inflammation. The stimulation of activated T lymphocytes by the altered skin constituents plays a role. The diagnosis is mainly clinical based on the chronological appearance of the lesions with the primary infection. Microbiological analysis of id lesions is sterile. Etiologies are various, venous stasis is the most commonly reported cause of autosensitization dermatitis. Bacterial, viral, parasitic, and fungal infections are also found to cause reactions in areas distant from the site of infection. Tinea pedis is the most frequent one. Id reaction to pediculosis capitis has rarely been reported. The term ‘pediculid’ was used for the first time in 1984 by Brenner and his colleagues. Clinical manifestations of id reaction are various. The eruption can be localized or generalized. Lesions can be vesicular, maculopapular, urticarial, lichenoid, morbilliform, or psoriatic. Erythema nodosum, erythema multiforme and Sweet syndrome have been described. The clinical manifestations mostly described in pediculid are eczematous lesions as seen in our patient, morbilliform rash, erythema annulare centrifugum and pityriasis rosea-like id reactions.

Conclusion:

Although rare, pediculid reaction should be considered in the presence of pediculosis of the scalp concomitant with a non-specific pruritic rash.
Abstract N°: 963

Mycoplasma pneumoniae-Induced Rash and Mucositis - Report of a Rare Pustular Variant

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Mycoplasma pneumoniae-Induced Rash and Mucositis - Report of a Rare Pustular Variant

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Introduction

Mycoplasma pneumoniae-induced rash and mucositis (MIRM) is a distinct entity involving mucocutaneous eruptions associated with Mycoplasma pneumoniae infection. This eruption is pleomorphic in nature, and lesions are commonly characterized as being vesiculobullous, targetoid, atypical targets, or macules. To our knowledge, a pustular variant of MIRM has not been reported in the adult population. Here, we present a case of a pustular eruption in an adult patient diagnosed with MIRM and describe the histological features seen.

Materials and methods

This is a single descriptive case report of a patient who was seen in our department of dermatology and followed up.

Results

A 67-year-old man with a history of hypertension, diabetes, and hyperlipidemia presented to the hospital with a five-day history of worsening rash, two days of painful oral and genital ulcers, and one day of fever. Review of systems and medication history was unremarkable. Skin examination revealed scattered clusters of vesiculopustules superimposed on dusky erythematous patches and thin plaques over the scalp, bilateral pinna of ears, chest, and back. He had erosions in the oral mucosa and on his scrotum.

Chest x-ray showed faint airspace opacification at the right lower zone. His blood investigations revealed mild lymphopenia associated with significantly elevated C-reactive protein and procalcitonin. The rest of the full blood count, serum creatinine, and liver panel were unremarkable. Herpes simplex and varicella-zoster PCR done on swab specimens from mucosal erosions and cutaneous pustules was negative. Skin punch biopsy from a pustule on his back revealed an intra-epidermal pustule with the adjacent epidermis showing spongiotic changes with neutrophilic and lymphocytic exocytosis, and focal vacuolar interface changes associated with scattered apoptotic cells and Civatte bodies. Special stain with PAS was negative for fungal organisms or mucin. Direct immunofluorescent was negative. In view of his pneumonia and prominent mucositis, mycoplasma infection was suspected. His Mycoplasma pneumonia particle agglutination test returned positive with a titer of 1:320.

The patient initially received an empirical course of intravenous co-amoxiclav and acyclovir, which was then switched to oral doxycycline 100mg twice a day upon confirmation of mycoplasma infection. He showed complete resolution of his pustular rash and his oral and genital erosions a week after instituting appropriate treatment.

Discussion
In conclusion, pustulosis is a rare cutaneous manifestation of MIRM. To our knowledge, there has only been one reported case in the pediatric population and our case represents the first reported case of pustular MIRM in the adult population. We also highlight the unique prominent involvement of the bilateral pinna of the ears in our patient and describe the associated histological features of pustular MIRM. In adult patients with acute onset pustulosis with mucocutaneous eruptions, *Mycoplasma pneumoniae*-induced rash and mucositis should be considered as a differential diagnosis.

(450 Words / 2660 Characters)
Mucormycosis is a dangerous and real fungal superinfection during the covid-19 pandemic

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Introduction & Objectives: Infection with the SARS-COV-2 virus and ongoing corticosteroid therapy form ideal conditions opportunistic infections. Mucormycosis in the vast majority of cases develops in patients with hyperglycemia and is a secondary life-threatening complication of a new coronavirus infection. It is known that the highest prevalence of the disease in India (78%), and in 37% of cases the disease is recorded in patients who have recovered from SARS-COV-2. On average, the verification of the diagnosis of mucormycosis occurs on the 15th day after the detection of a new coronavirus infection in a patient.

Materials & Methods: For the period from 2020 to 2022, 36 patients (25 men, 69.4% and 11 women, 30.6%; age from 52 to 71 years) were referred to the Moscow Center for Deep Mycoses with suspected mucormycosis. The diagnosis was confirmed in 32 patients (88%) by histological and microbiological assay, in 4 (12%) it was impossible to verify the diagnosis, however, due to the typical clinical picture of mucormycosis, two of these patients received specific treatment with a good effect.

Results: In all patients (n=36.100%) mucormycosis developed after suffering a coronavirus infection against the background of type 2 diabetes mellitus, and in 3 patients, diabetes mellitus was first diagnosed in a covid hospital. Most patients before the onset of mucormycosis received high doses of dexamethasone and had changes in their immune status. The most of study participants had unilateral lesions involved the paranasal sinuses (sinusitis, pansinusitis, hemisinusitis, necrotizing sphenoeethmoiditis), soft tissues of the face and orbit of the eye, meninges, bones of the facial skeleton (more often osteomyelitis and osteonecrosis of the upper jaw) and the base of the skull prevailed. A severe course of the disease was observed in rhinocerebral and nasoorbitocerebral forms of mucormycosis. The most severe condition and insufficient clinical effect of the therapy were observed in patients with a combined course of aspergillosis and mucormycosis.

Conclusion: Covid infection, uncontrolled diabetes and excessive use of corticosteroids are risk factors for the development of mucormycosis. Due to the increase of mucormycosis incidence during the COVID-19 pandemic, it is necessary to increase alertness of medical personnel for timely diagnosis and initiation of treatment for this dangerous opportunistic infection.
Abstract N°: 1133

Implication of Serum Human Parvovirus B19 polymerase chain reaction in Erythema infectiosum

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Introduction & Objectives:

Erythema infectiosum (EI) is a childhood illness commonly observed among school-aged children and is caused by the infection of Human parvovirus B19 (B19). The positive of serum B19 polymerase chain reaction (PCR) result aid diagnosis of and confirmation of EI and B19 related diseases.

Materials & Methods:

We retrospectively reviewed the medical records of the patients who suspected for EI from last 10 years (January 2009 – August 2019) in our hospital found eighty three patients.

Results:

A total of 83 patients (male to female ratio, 1.08) with a mean age of 8.45 years (range, 0.7 – 43 years) were evaluated. We identified B19 by PCR from serum in 27 cases (33%), results of test were positive in 18 and negative in 9. The average time from skin symptoms to PCR is 4.9 days in positive and 8.3 days in negative. Most patients has similar lapse of illness, resolved skin lesion in 1-2 weeks without other complications like aplastic anemia. Four cases (2 detected B19, 2 didn’t do) had arthralgia, and thirty eight patients (9 detected B19, 8 not detected and 21 didn’t do) had upper respiratory tract infection symptoms with mild fever. In these patients needed for differential diagnosis with drug eruption (3 cases), viral exanthem (8 cases) and acute urticaria (4 cases).

Conclusion:

EI usually diagnosed clinically. However, a B19 PCR is recommended for patients who suspected EI with atypical symptoms.
Successful Low-Dose Corticosteroid Treatment for Recurrent Reversal Reaction in Borderline Tuberculoid Leprosy

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**Introduction & Objectives:**

Leprosy is a neglected tropical disease caused by *Mycobacterium leprae* that may trigger immunological reactions that can lead to neuritis and nerve damage resulting in significant morbidity when left untreated. The mainstay treatment for these reactions is long-term systemic corticosteroids with a dosage equivalent of 40mg prednisone slowly tapered off within 12 weeks as recommended by the World Health Organization (WHO).

**Materials & Methods:**

An 18-year-old female visited the outpatient clinic with painful erythematous rash on the left cheek and ears three months prior. Initially lesions started as white patches. She had a history of paucibacillary (PB) leprosy treated with multidrug treatment (MDT) for 6 months two years prior, where the patient experienced similar complaints 3 months into MDT treatment. Physical examination found vital signs within normal limits. Dermatological examination revealed erythematous plaques and scales along with hypoesthesia on the left malar extending to the left post-auricular region. In addition, enlargement of the left ulnar nerve was also found. Histopathological examination confirmed the diagnosis of borderline tuberculoid (BT) leprosy and reversal reaction (RR). The patient was subsequently treated with daily 16mg methylprednisolone and a 6-month regiment of PB MDT. After 1 month of treatment, significant clinical improvement with no side-effects was reported. Methylprednisolone was then tapered off to 8mg for 2 weeks and subsequently stopped after patient experienced full resolution.

**Results:**

The Ridley-Jopling criteria of leprosy classified BT leprosy within the PB spectrum and an unstable type of leprosy prone to immunologic reactions. RR is a type IV hypersensitivity reaction towards *M. leprae* antigens that may occur prior, during, or after MDT treatment, and can lead to significant to permanent nerve damage when not adequately treated. According to WHO guideline, corticosteroids are the mainstay treatment for leprosy reactions. However, the WHO-recommended dosage can potentially lead to various side-effects, especially as RR treatment can last for long periods of time depending on the patient’s clinical improvement. In this case, we opted a lower dosage of 16mg methylprednisolone equivalent to 20mg prednisone as our patient showed a mild RR where only limited areas were affected with mild neuritis and no signs of significant systemic involvement. However, RR occurring on the face should prompt physicians to be more cautious as there are numerous nerves involved. Follow up of the patient found satisfying clinical results as complaints subsided after one month of treatment with no sequelae.

**Conclusion:**

Low-dose corticosteroid treatment may prove beneficial for recurrent mild RR treatment with less side-effects compared to the WHO-approved treatment regimen.
Abstract N°: 1250

Severe Cutaneous Disseminated Histoplasmosis in HIV/AIDS Patient

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Introduction & Objectives:

Histoplasmosis is an opportunistic infection caused by *Histoplasma capsulatum* due to inhalation of its microconidia from the environment. The diagnosis is based on isolating the organisms or visualization of the yeast from tissue. Liposomal amphotericin B is recommended for severe disseminated histoplasmosis among AIDS patients. We report a patient currently diagnosed with AIDS who developed severe disseminated cutaneous histoplasmosis. This is a crucial differential diagnosis for the dermatologist when dealing with immunocompromised patients.

Materials & Methods:

A 28-year-old male complained of painful generalized nodules and ulceration on his skin for 2 months. He was recently diagnosed with HIV and received anti-retroviral therapy (ART). He is homosexual with a history of unprotected sexual activity. Over the last month, he suffered from prolonged fever, significant weight loss, speaking irrationally, and being disabled in his daily activities. His was weak and wasting (BMI 14.7 kg/m2). Dermatologic examination found multiple redness vegetated nodules and ulceration. He was anemic (Hb 7.5 g/dL) with a very low CD4 count (2 cells/μL). Serology for syphilis, hepatitis B, and C was non-reactive. The blood culture for fungal was negative. Histopathology examination from a papule on the left lower leg demonstrated diffuse granuloma containing spores with the perinuclear halo. Staining with periodic acid-Schiff (PAS) and Grocott’s methenamine silver (GMS) was positive. Touch biopsy from papule on the chest also showed intracellular spores with the perinuclear halo.

He was diagnosed with AIDS and severe disseminated cutaneous histoplasmosis. He received IV deoxycholate amphotericin B 1 mg/kg/day for 14 days, followed by itraconazole 3x200 mg for 3 days then 2x200 mg for a year, trimethoprim-sulfamethoxazole, and ART. Topically, he received salicylic acid 1/1000 wet dressing and mupirocin ointment. After completing therapy, all skin lesions have cleared, leaving scars and hyperpigmented macules.

Results:

Histoplasmosis is one of the AIDS-defining illnesses with a high mortality rate (17.5 - 45%). The risk factor for mortality includes respiratory or kidney failure, serum protein <60 g/L, Hb <8.9 g/dL, and WHO performance status >2. This case was in accordance with severe histoplasmosis.

Although culture is a gold standard, the sensitivity is low and negative result does not exclude the diagnosis. Visualization of intracellular small ovoid yeast leads to the diagnosis of histoplasmosis. GMS and PAS staining may help enhance the yeast’s visualization.

Liposomal amphotericin B 3.0 mg/kb for two weeks is recommended for severe disease. If liposomal amphotericin B is unavailable, deoxycholate amphotericin B 0.7-1.0 mg/kg could be used. It is continued with itraconazole 3x200 mg for 3 days and 2x200 mg for 12 months. ART should be initiated soon for whom central nervous system involvement is not suspected or proven. In this case, ART was continued, and he completed the 12 months of
therapy with improvement.

**Conclusion:**

Diagnosis of histoplasmosis might be complicated by the low sensitivity of tissue culture, but special histochemistry staining should be able to demonstrate the characteristic fungal elements. Initial therapy with amphotericin B followed by year-long itraconazole are crucial for reducing morbidity and mortality. Immediate ART initiation is associated with immune restoration, which can prevent later relapses.
The Role of Corticosteroid in a Case of Actinomycetoma in South-West Nigeria-A Case Report

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1Lagos State University Teaching Hospital (LASUTH), Internal Medicine, Dermatology Unit., Ikeja, Nigeria

Introduction & Objectives: Madura foot is a rare, chronic infection of the skin and subcutaneous tissue caused by filamentous bacteria (Actinomycetoma) or fungi (Eumycetoma). It commonly presents with the triad of painless swelling, sinus formation and discharge of granules. Steroids are not routinely recommended in the treatment but could potentially shorten the clinical course of the disease. Mycetoma can result in foot amputation if diagnosis is not promptly made or if medical treatment fails which can negatively impact the patient’s quality of life.

Materials & Methods: We report a case of a 34-year-old petty trader who presented with a one-year history of progressive swelling and pain of the right foot with sinuses discharging pus and grains. Histopathology report and radiograph of the right foot were consistent with that of Actinomycetoma. She had the modified two step treatment with Clotrimazole tablets 960mg twice daily and Intravenous Gentamycin 160mg daily (4 weeks) and was maintained on Doxycycline 100mg twice daily and Clotrimazole 960mg twice daily for the later 6 months.

Results: She also had a short course of prednisolone for persistent pain and swelling in the initial 2 weeks of treatment with good and sustained clinical response by the second month of treatment.

Conclusion: Prompt diagnosis, use of antimicrobial combinations and steroid have proven to be effective in the management of Actinomycetoma.
Suspected loxoscelism with multiple life-threatening complications: A case report

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1Hospital Specialties Issste, Internal Medicine, Veracruz, Mexico, 2Academia Mexicana de Dermatologia, Ciudad de México, Mexico

Introduction & Objectives:

Loxoscelism, defined as envenomation caused by spiders of the genus Loxosceles, is a public health concern, particularly in tropical areas. Loxoscelism manifests clinically through local and systemic disease. The Phospholipases-D family of toxins triggers most of the serious clinical manifestations, including dermonecrosis, hemolysis, and acute renal failure. Diagnostic testing is limited, making loxoscelism challenging to diagnose, but it can be suspected based on the patient’s history and physical findings.

Materials & Methods:

We present the case of a woman with suspected loxoscelism. A systematic review was conducted on BVS database. “Loxoscelism” keyword were searched; of the 459 studies identified, 20 articles have been included.

Results:

A 73-year-old woman presented to the emergency room with tachycardia, dyspnea, haematuria, and hypotension. Dermatological examination revealed a 4x5 cm ulcer on the right distal posterior triceps, circumscribed by livedoid plaque. The ulcer began 48 h earlier as a painful papule on the right elbow tip. Her medical record includes hypertension well controlled with telmisartan.

Blood analysis showed anemia 10.2 g/dL, thrombocytopenia 70 10^3/µL, leukocytosis 19.67 10^3/µL, serum creatinine 2.37 mg/dL, lactate 5.4 mmol/L, protein C-reactive 329.3 mg/L, procalcitonin 10.0 ng/mL, and metabolic acidosis. Her blood pressure was 80/40 mmHg, meeting criteria for septic shock, so clindamycin and ceftriaxone were started. She failed a fluid challenge, requiring ionotropic support. She also needed oxygen therapy. In the next hours, the ulcer grew, necrotized its core, and devitalized its periphery. The livedoid plaque extended to the right lateral deltoid with disseminated blisters. Consequently, the antibiotics were switched to meropenem and linezolid.

Cellulitis and compartment syndrome were the differential diagnoses due to dermatosis exacerbation. We considered loxoscelism after a “bug bite” hint. Dermatology, epidemiology, and plastic and reconstructive surgery departments confirmed loxoscelism. Polyvalent antiloxosceles antiserum were recommended.

Before antiserum, the patient’s condition deteriorated, arising supraventricular tachycardia. A dose of adenosine was prescribed, which was followed by the development of atrial flutter. Electrical cardioversion with 25 and 50 joules restored sinus rhythm after hemodynamic instability was detected.

Hypoperfusion and acute kidney injury resolved after the antidote, debridement, and multidisciplinary care. After 12 days, she was discharged due to improvement. The wound full recovered in 6 weeks.

Conclusion:

Loxoscelism has the potential to result in notable levels of morbidity due to the occurrence of severe local
reactions and systemic illness. Septic shock, acute renal injury, and arrhythmia worsened the patient’s condition, requiring life support. Following the administration of the antiserum, debridement, and supportive measures, patient improved.
Abstract N°: 1378

**Use of Neutrophil-to-Lymphocyte Ratio, Lymphocyte-to-Monocyte Ratio, and Platelet-to-Lymphocyte Ratio in the Diagnosis of Lepra reactions**

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1 All India Institute Of Medical Sciences, Raipur, Department of Dermatology, Raipur, India

**Introduction & Objectives:** Lepra reactions are regarded as acute or subacute episodes characterised by cutaneous and systemic involvement caused by changes in immune response of leprosy patient which leads to morbidity and nerve damage. There are no standard diagnostic criteria for lepra reactions. Measurement of Neutrophil-to-Lymphocyte ratio (NLR), Lymphocyte-to-Monocyte ratio (LMR), and Platelet-to-Lymphocyte ratio (PLR) in lepra reaction patients might have implications in predicting the onset and severity of lepra reactions as well as monitoring therapeutic response. The aim of this study was to study the diagnostic value and accuracy of NLR, LMR, and PLR in diagnosing lepra reactions.

**Materials & Methods:** This was a cross-sectional retrospective study including untreated adult (> 18 yrs) leprosy patients with and without lepra reaction who were subjected to a complete blood test on the same day of diagnosis.

**Results:** A total of 65 patients were included in the study with 30 in leprosy without reaction group and 35 in lepra reaction group (23 in type 1 reaction (T1LR) and 12 in type 2 reaction (T2LR) subgroups).

Median white blood cells, neutrophil, and thrombocyte counts were significantly higher in T2LR patients as compared to leprosy patients without reaction and T1LR patients (Table 1). NLR and PLR revealed a positive correlation with the incidence of both type 1 and type 2 lepra, while LMR showed a negative correlation. NLR was significantly higher in T2LR patients as compared to their non-reactive counter parts. The NLR cut-off point for the diagnosis of T2LR was 3.41 (sensitivity 83.3%, specificity 70%), while that of T1R was 2.83 (sensitivity 69.6%, specificity 53.3%). Similarly, the PLR cut-off point for the diagnosis of T2LR and T1LR was 207.8 (sensitivity 41.7%, specificity 70%) and 169.74 (sensitivity 60.9%, specificity 66.7%) respectively.

**Conclusion:** This study indicates that NLR and PLR had 73.8% and 61.9% accuracy in diagnosing the occurrence of T2LR and 60.3% and 64.1% in that of T1LR. These values can be evaluated by a low-cost simple differential count and could act as potential biomarkers for the diagnosis of lepra reactions.

**Table 1. Comparison of blood counts between the groups**
<table>
<thead>
<tr>
<th>Blood count</th>
<th>Comparisons between groups</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBC</td>
<td>Leprosy vs. Type I reaction</td>
<td>0.141</td>
</tr>
<tr>
<td></td>
<td>Leprosy vs. Type II reaction</td>
<td>0.001*</td>
</tr>
<tr>
<td></td>
<td>Type I vs. Type II reaction</td>
<td>0.001*</td>
</tr>
<tr>
<td>Neutrophil</td>
<td>Leprosy vs. Type I reaction</td>
<td>0.099</td>
</tr>
<tr>
<td></td>
<td>Leprosy vs. Type II reaction</td>
<td>0.001*</td>
</tr>
<tr>
<td></td>
<td>Type I vs. Type II reaction</td>
<td>0.001*</td>
</tr>
<tr>
<td>Lymphocyte</td>
<td>Leprosy vs. Type I reaction</td>
<td>0.767</td>
</tr>
<tr>
<td></td>
<td>Leprosy vs. Type II reaction</td>
<td>0.549</td>
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<tr>
<td></td>
<td>Type I vs. Type II reaction</td>
<td>0.434</td>
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<tr>
<td>Monocyte</td>
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<tr>
<td></td>
<td>Leprosy vs. Type II reaction</td>
<td>0.055</td>
</tr>
<tr>
<td></td>
<td>Type I vs. Type II reaction</td>
<td>0.305</td>
</tr>
<tr>
<td>Thrombocyte</td>
<td>Leprosy vs. Type I reaction</td>
<td>0.993</td>
</tr>
<tr>
<td></td>
<td>Leprosy vs. Type II reaction</td>
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<tr>
<td></td>
<td>Type I vs. Type II reaction</td>
<td>0.014*</td>
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<tr>
<td>NLR</td>
<td>Leprosy vs. Type I reaction</td>
<td>0.018*</td>
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<td>Type I vs. Type II reaction</td>
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<td>LMR</td>
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<td>0.084</td>
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<td>Type I vs. Type II reaction</td>
<td>0.677</td>
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<td>PLR</td>
<td>Leprosy vs. Type I reaction</td>
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<td></td>
<td>Leprosy vs. Type II reaction</td>
<td>0.278</td>
</tr>
<tr>
<td></td>
<td>Type I vs. Type II reaction</td>
<td>0.728</td>
</tr>
</tbody>
</table>

*Statistically significant difference exists (p<0.05)
Abstract N°: 1390

Cutaneous Botryomycosis in Immunocompetent Patient

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Introduction & Objectives:

Botryomycosis is a chronic suppurative granulomatous bacterial infection in which the organisms form granules composed of bacterial masses that are bound to each other. It is a rare condition that involves the skin and viscera. It is mainly described in immunocompetents patients. Our observation illustrates a rare case of botryomycosis occurring in a young immunocompetent patient.

Materials & Methods: Case report

Results:

A 42-year-old young adult presented with an 8-year history of multiple nodular skin lesions, the patient was put on amoxicillin, clavulanic acid, antihistamines, dermocorticoids, phototherapy without improvement. Skin examination revealed multiple nodular, cystic, granulomatous, indurated and slightly painful lesions, located in the upper and lower limbs. The rest of the somatic examination was unremarkable. Routine blood investigations were normal, Ziehl–Neelsen stain, and fungal culture were negative, microscopy of minced tissue after Gram-stain showed Gram-positive cocci in groups and beta hemolysis was noted over blood agar, indicating *Staphylococcus aureus* as the underlying pathogen, histopathology revealed features of botryomycosis. The patient was put on cotrimoxazole with favorable evolution.

Discussion:

Botryomycosis is a rare disease with few cases being reported worldwide. Review of the literature has shown around 140 published cases of botryomycosis, and cutaneous form of the disease was addressed in 28 articles.

Botryomycosis is caused by many bacteriae, while *S. aureus* being the most common, followed by *Pseudomonas aeruginosa*. Other microorganisms are reported. The major predisposing factors are skin trauma, postoperative complications, diabetes mellitus, liver disorders, treatment with steroids, alcoholism and cystic fibrosis. However, it can occur even in immunocompetent individuals too as in our patient.

Botryomycosis can be cutaneous or visceral. Cutaneous form presents as nodules, abscesses, and sinuses with purulent discharge and grains, which heal after several months to leave atrophic scars. Extremities are commonly involved. Devi et al. reported the same on forehead and scalp that is an unusual site. Katkar et al. reported Red grain botryomycosis due to *S. aureus*. Visceral form usually involves lung and is associated with cystic fibrosis.

Botryomycosis should be clinically differentiated from other conditions like mycetoma, actinomycosis, actinomycetoma, nocardiosis and tuberculosis who have similar clinical features. Microscopy of the discharge, culture and sensitivity tests and biopsy helps in confirming the diagnosis.
The treatment with prolonged course of antibiotics depending up on pus culture and sensitivity is recommended for botryomycosis. However, appropriate antibiotics in combination with surgical excision is the most effective therapy for botryomycosis.

Conclusion:

This case is reported for its rarity and its likelihood to be mistaken for diseases such as mycetoma and actinomycosis (which differ in etiology and treatment).
The efficacy and safety of intralesional immunotherapy for the treatment of multiple warts in diabetic patients.

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Introduction & Objectives:

Diabetic patients tend to suffer from more extensive warts, require more prolonged time for wart clearance, and have more recurrence rates compared to non-diabetic patients. This can be attributed to defective immune response in those patients. Warts in diabetic patients should be treated cautiously with traditional ablative modalities as they carry the risk of wound healing complications, especially in patients with poor glycemic control. Intralesional immunotherapy has been popular in the treatment of warts as it induces the production of Th1 cytokines, which activate cytotoxic and natural killer cells to eradicate HPV infection in both the injected and distant warts. The aim of the study is to evaluate the efficacy and safety of intralesional Candida antigen injection for the treatment of multiple warts in diabetic patients.

Materials & Methods:

Fifty patients with type 2 diabetes who suffer from multiple genital/nongenital warts were divided into two groups. The first group (30 patients) received intralesional Candida antigen, and the second group (20 patients) had intralesional saline as control. The treatment was injected into the largest wart every 2 weeks until complete clearance of warts or for a maximum of 5 sessions.

Results:

Complete clearance of warts was observed in 80% of the diabetic patients in the Candida antigen group compared with 15% in the control group \((P < .001)\). Side effects to Candida antigen included pain during injection in all patients, flu-like symptoms, and localized reaction at the injection site in few patients.

Conclusion:

Intralesional immunotherapy can be a promising effective and safe therapeutic option for the treatment of warts in diabetic patients. It can potentially enhance the immune response and overcome the wound healing complications of destructive measures.
Abstract N°: 1399

Atypical presentations of Cutaneous Leishmaniasis among patients attending to a District Base Hospital in Sri Lanka

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¹District Base Hospital Dambulla, Dermatology, DAMBULLA, Sri Lanka

Introduction & Objectives: Cutaneous Leishmaniasis (CL) is a poorly attended tropical disease which is heavily concentrated in certain parts of Sri Lanka. CL in Sri Lanka is due to *Leishmania donovani*. Mucosal and visceral lesions have seen rarely in Sri Lanka. Large number of cases were presented to Dambulla district general hospital during last few years. Main objective is to identify the atypical presentations of CL and their prevalence. New patterns of clinical manifestations are to be identified.

Materials & Methods: Cross sectional study design with systematic sampling for randomization of data was used in the study. Consented patients’ pictures were taken for the assessment. 256 patients were selected for the analysis.

Results: 220 adult patients and 36 children were included to the study. Most of the lesions were seen over exposed skin of face, upper limb, lower limb and few lesions over non-exposed parts of trunk. Mucosal extension and lip lesions were noted in four patients.

Atypical type of facial lesion was noted over nose with induration in an elderly patient. Pyoderma gangrenosum like ulcerative lesions were noted over leg in three patients. Erysepeloid type lesions and Vegetative type lesions were noted in few patients. Lymphatic spread was noted in one upper limb lesion.

Conclusion: Limited number of atypical CL lesions were seen and most of the appearances were due to interventions or changes occur with day today activities. Knowing of the different types of atypical lesions are very important to come to the diagnosis in remote settings.
Abstract N°: 1475

Comparison of serum levels of interleukin -17 and interleukin-9 in leprosy patients with and without lepra reaction

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Introduction & Objectives: New pathways of host defense have emerged in leprosy, such as T helper (Th) -17, Th-9, T regulatory cells, and other factors like transforming growth factor-beta, etc. Interleukin (IL) 17 produced by Th17 cells has been found to be elevated in lepra reaction especially type 2 lepra reaction. The role of IL-9 has not been studied widely in leprosy reactions so far. The aim of this study was to compare serum levels of IL-17 and IL-9 in leprosy patients with lepra reactions as compared to patients without lepra reactions.

Materials & Methods: This was a cross-sectional analytical study including untreated adult leprosy patients with and without lepra reaction. A total of 65 patients were included in the study with 30 leprosy patients without reaction and 35 with lepra reaction. Serum levels of IL-17 and IL-9 were measured in these patients using direct enzyme linked immunosorbent assay and were compared.

Results:

IL – 17 - Borderline tuberculoid (BT) leprosy with type 1 and Lepromatous (LL) leprosy with type 2 lepra reaction patients showed significantly higher levels of IL- 17 than BT and LL leprosy patients without lepra reaction respectively.(Table 1)

IL – 9 - LL patients with type 2 lepra reaction showed significantly lower levels of IL- 9 than lepromatous cases without reaction. The levels were higher in BT patients with type 1 lepra reaction as compared to BT patients without reaction but the difference was not significant.

Conclusion: Interleukin 17 and 9 were identified as potential serum markers for lepra reaction.** IL-17 is a proinflammatory cytokine present across entire leprosy spectrum and its serum levels are increased in type 2 lepra reaction and type 1 lepra reaction in tuberculoid pole.** IL-9 acts synergistically with TH1 cytokines and antagonises effects of TH2 cytokines. Its serum levels are increased in type 1 and decreased in type 2 lepra reaction as compared to their counterparts. They might serve as a therapeutic target to manage severe lepra reactions not responding to conventional therapeutic options. Additional studies on these biomarkers will help us understand the role newer T lymphocyte subpopulation such as Th9 and Th17 in complex immune response against M. leprae.

Table 1: Comparison of serum levels (mean ± SD) of IL-17 and IL-9 in different groups of patients
<table>
<thead>
<tr>
<th>Group</th>
<th>IL-17 level (pg/ml)</th>
<th>IL-9 level (pg/ml)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IL-17</td>
<td>IL-9</td>
<td></td>
</tr>
<tr>
<td>BT (9) vs BT with T1R (11)</td>
<td>94.81 ± 14.31</td>
<td>111.53 ± 17.35</td>
<td>0.93 ± 0.46</td>
</tr>
<tr>
<td>BL (6) vs BL with T2R (11)</td>
<td>99.02 ± 9.99</td>
<td>117.07 ± 35.36</td>
<td>1.08 ± 0.69</td>
</tr>
<tr>
<td>LL (15) vs LL with T2R (11)</td>
<td>92.73 ± 17.16</td>
<td>106.54 ± 10.40</td>
<td>1.07 ± 0.60</td>
</tr>
<tr>
<td>Tub. (9) vs Lep. Leprosy (21)</td>
<td>94.81 ± 14.31</td>
<td>94.52 ± 15.48</td>
<td>0.93 ± 0.46</td>
</tr>
<tr>
<td>T1R (23) vs T2R (12)</td>
<td>112.95 ± 27.46</td>
<td>106.41 ± 9.55</td>
<td>1.03 ± 0.58</td>
</tr>
</tbody>
</table>

P<0.05 was considered significant, Tub.=Tuberculoid, Lep.=Lepromatous
A case of Tinea Cruris caused by Trichophyton benhamiae

Isabel Polimon Olabarrieta¹, Berta Perez Tato², Silvia Marinero Escobedo³, Belen Lozano Masdemont³, Evelina De la Cruz Gomez¹, Raquel Paz Pérez², Monserrat Franco Muñoz¹

¹Hospital Universitario de Móstoles, Dermatology, Móstoles, Spain

Introduction & Objectives: Trichopyton benhamiae (previously known as Arthroderma benhamiae) is a zoophilic dermatophyte that can cause highly inflammatory tinea in humans and animals. The first human case was reported in 1975, and tinea corporis is the most frequent presentation, followed by tinea faciei. Guinea pigs and other small animals are the most common source. We present a patient with inflammatory tinea cruris caused by T. Benhamiae in which we couldn’t found the origin.

Materials & Methods: A 24th year old man came to our clinic with a 3 weeks history of lesions in his left groin that had progressed despite treatment with itraconazole and topical antifungals. He did not refer contact with animals. He worked at the airport as a baggage porter. The lesion was initially an annular erythematous plaque but it became more and more inflammatory with numerous pustules and crusts that caused itch and pain. We performed a biopsy and culture that showed T. Benhamiae. Oral treatment with Terbinafine led to a significant improvement of the lesions, but we had to continue with it for two months until complete healing.

Results: Trichopyton benhamiae is an emerging pathogen and cases have been reported in several countries in Asia, America and Europe. The most frequent presentation is tinea corporis and faciei.

Conclusion: Ours is one of the first cases with tinea cruris caused by T. Benhamiae. The patient denied contact with animals. Maybe the patient’s job in the airport with baggages from different countries was the origin. As the lesions were so inflammatory, treatment was required for more than 8 weeks until complete healing was achieved.
Introduction & Objectives:
Jorge Lobo’s disease (JLD) is a chronic cutaneous and subcutaneous fungal granulomatous disease, caused by Lacazia loboi. Lepromatous leprosy (LL) etiology is Mycobacterium leprae infection. JLD and LL share several clinical, histological (an exuberance of macrophage) and immunological features.

Macrophages exhibit immunologically polarized states. The M1 macrophages trigger a pro-inflammatory immune response, which amplify and sustain inflammation and destroy pathogens. M2 macrophages produce anti-inflammatory cytokines, that help to resolve the process, preventing its perpetuation.

Previous reports point out to a predominance of the M2 response in JLD and LL, which results in permanence of pathogens in tissues and sustained inflammation.

To better understand LL and JLD’s pathogenesis, we studied the immunophenotype profile of macrophage subtypes in skin lesions of 52 JLD patients, comparatively with 16 LL.

Materials & Methods:
We used panmacrophage (CD68), selective immunohistochemical markers for M1 (iNOS) and M2 (CD163, CD204) responses, HAM56 (resident macrophage) and MAC 387 (recently infiltrating macrophage) (Figure 1).

Immunostained macrophages density were quantitatively evaluated through Image J software and the results tested by Fisher’s exact test, Mann-Whitney, Wilcoxon sum rank or Spearman’s correlation test. Values of $p$ less than 0.05 were considered significant.

Results:
There was no statistical difference in the density of CD163+, CD204+, MAC387+ and iNOS+ immunostained cells between the diseases, but HAM56+ cells density was higher in LL samples ($U= 274.5; p<0.05$) (Table 1).

Comparing macrophage immunomarkers M1 (iNOS) and M2 (CD163 and CD204) separately, in each disease, we found a higher density of CD163+ cells in LL when compared with iNOS ($z= -3.52; p<0.05$), but no differences when comparing CD204 with iNOS. In JLD, higher CD163+ cells density than iNOS+ ($z= -4.25; p<0.05$) and a higher density of CD204+ density than iNOS+ ($z= -2.41; p<0.05$) were found (Graph 1).

MAC387+ cells density was lower than all other markers in both diseases (Graph 1). There was a significant higher rate of MAC387-negative cells within inflammatory infiltrate in JLD than in LL ($U= 258.5; p<0.05$).

Conclusion:
Our results reinforce a higher M2 response in JLD and LL patients, depicting predominant production of anti-
inflammatory cytokines, but also some distinction in degree of macrophage activation. Plenty of iNOS + macrophages take part in the immune milieu of both, LL and JLD, displaying impaired microbicidal activity, as alternatively activated M2 cells.

HAM56+ cells, may be important sources of pro- and anti-inflammatory cytokine production that also influence how successful a granuloma is at containing bacterial replication and dissemination.

MAC-387 allows a temporal evaluation of macrophage renewal and the disease course. The small number of MAC387 density cells is in line with the chronic development of both diseases. The finding of a greater number of not MAC387 stained cells in JLD is probably due to the major chronicity of JLD, in relation to LL, which has a shorter average duration at the time of diagnosis.

**Figure 1. Immunohistochemistry of Jorge Lobo’s Disease**

![Image of immunohistochemistry](image)

**Table 1. Compared density of immunomarkers between diseases**

<table>
<thead>
<tr>
<th></th>
<th>Disease</th>
<th>N</th>
<th>Mean Rank</th>
<th>U</th>
<th>p value</th>
</tr>
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<tbody>
<tr>
<td>iNOS</td>
<td>JLD</td>
<td>52</td>
<td>32.53</td>
<td>313.50</td>
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</tr>
<tr>
<td></td>
<td>LL</td>
<td>16</td>
<td>40.91</td>
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<tr>
<td>CD204</td>
<td>JLD</td>
<td>52</td>
<td>34.30</td>
<td>374.50</td>
<td>0.815</td>
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<tr>
<td></td>
<td>LL</td>
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<tr>
<td>CD163</td>
<td>JLD</td>
<td>52</td>
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<td></td>
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<td>16</td>
<td>38.44</td>
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<tr>
<td>MAC387</td>
<td>JLD</td>
<td>52</td>
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<td>LL</td>
<td>16</td>
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<tr>
<td>HAM56</td>
<td>JLD</td>
<td>52</td>
<td>31.78</td>
<td>274.50</td>
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<tr>
<td></td>
<td>LL</td>
<td>16</td>
<td>43.34</td>
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</table>

Calculated indices using Mann-Whitney Test

* p<0.05
JLD= Jorge Lobo’s Disease
LL= Lepromatous leprosy
Graph 1. Significant comparative analyses in each disease between INOS and CD163, INOS and CD204

A
Wilcoxon Signed Ranks Test (p<0.05)
A-angan’s disease
B- dermato-ill逢omy
CD4+CD56+CD16

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Abstract N°: 1526

Evaluation of two types of methylene blue administration vehicles for photodynamic therapy on toenail onychomycosis: a pilot study

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Introduction & Objectives:

The choice of a specific photosensitive system (PSS) may have an impact on the final result of a photodynamic treatment. The aim of the present work was to compare the short- and medium-term efficacy of photodynamic therapy (PDT) mediated by two different PPSs containing methylene blue (MB) in the treatment of moderate onychomycosis.

Materials & Methods:

In this active-controlled study, male and female adult patients with distal-lateral or lateral subungual dermatophyte onychomycosis of the first-toe nail were randomly divided into two groups. In Group I, 13 nails were treated with a 2% w/w aqueous solution of MB, whereas in Group II, another 13 nails were treated with topical ungual cream with 40% w/w of urea and 2% w/w of MB. Ten sessions of PDT separated by an interval of 1 week were applied. Photographs were used for onychomycosis severity index (OSI) estimation allowing clinical assessment at any point of the study. Microscopic and microbiological tests were carried out at baseline and at week 17 and 30 post-treatment. Side effects were also recorded.

Results:

Both PSSs showed a similar effectiveness and no side effects were reported. At week 30, clinical cure rates were 46% and 38% and mycological cure rates were 70% and 62% in Group I and Group II, respectively. No significant differences were observed between groups in the proportion of nails achieving a complete cure.

Conclusion:

Both PSSs were effective and safe with similar responses in the medium-term in the treatment of moderate toenail onychomycosis.
A case of multiple viral warts on the face during JAK inhibitor treatment.

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Abstract:

Janus kinases (JAKs) are essential signalling mediators downstream of many pro-inflammatory cytokines. Tofacitinib is a JAK1 and JAK3 inhibitor, partially acting on JAK2 and TYK2 as well.

Herein, we report a case of multiple viral warts on the face during the treatment with tofacitinib. A 76-year-old Japanese male visited our outpatient clinic because of multiple papules on his face. The papules appeared two months ago when just after the restart of tofacitinib treatment for rheumatoid arthritis. Histopathological examination showed hyperkeratotic papilloma with koilocytosis. Immunohistochemistry was positive for HPV in parts of the koilocytosis. These findings led to the diagnosis of viral warts. The warts disappeared rapidly after discontinuation of tofacitinib.

It is known that one of the most common adverse events with tofacitinib is herpes zoster, and a dose-dependent association between tofacitinib use and risk of herpes zoster was reported. Blocking of antiviral defenses by type I interferons with inhibition of JAK1, by natural killer cells with inhibition of JAK3 may increase the risk of viral infection. We will discuss on the mechanism of JAK inhibitor-induced viral warts.
Dermatophytosis transmitted by guinea pigs

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Introduction & Objectives:

A 9-year-old girl presented to the dermatology outpatient clinic with lesions on her left arm and ear. Her mother reported the appearance of a pruritic plaque on the right bicipital region, and after 7 days, a new erythematous, scaly, and exudative plaque on the left earlobe. The objective of this case report is to describe the diagnostic and therapeutic approach adopted for this patient, as well as to discuss the transmission of *Trichophyton mentagrophytes* by guinea pigs (*Cavia porcellus*) and the importance of considering unconventional pets as a potential zoonotic risk.

Materials & Methods:

Specimen was collected from the lesion by scraping and direct mycological examination was performed. The material was cultured on Sabouraud and Mycosel media. Microscopic analysis was performed to identify the causative agent of the infection. Treatment with terbinafine 250 mg was initiated and the patient was advised to take the guinea pig to the veterinarian for appropriate treatment.

Results:

Direct mycological examination showed hyaline, septate, branched hyphae with arthroconidia. In the macroculture, finely granular, white colonies with a brownish backside were observed, which was compatible with *Trichophyton mentagrophytes*. Microscopic analysis showed hyaline, septate, branched hyphae with rounded microconidia grouped in clusters, as well as cylindrical macroconidia. The clinical lesions improved progressively until complete resolution of the disease. In addition, identification of the fungus using the MALDI-TOF method, a molecular test for microorganism identification through mass spectrometry, confirmed the initial diagnosis made by culture of *T. mentagrophytes* as the etiological agent.

Conclusion:

*Trichophyton mentagrophytes* is a zoophilic fungus frequently found in rodents, being the most commonly reported dermatophyte species in guinea pig dermatophytosis. Transmission to humans occurs through direct contact with the host animal, and children are more frequently infected than adults. The infection is potentially contagious, and itching is a common symptom. Diagnosis is based on clinical suspicion and can be confirmed by direct mycological examination and culture of the lesion. Treatment of patients, animals, and cleaning of contaminated items and areas should be performed simultaneously. The choice between topical or combined systemic therapy depends on the clinical extent of each case, and systemic options include terbinafine, itraconazole, and fluconazole. It is important to remember that unconventional pets, especially rodents, may be considered zoonotic risks for humans, especially children.
Atypical cutaneous tuberculosis with an unusual course

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Introduction & Objectives:
Cutaneous tuberculosis is rare, representing only 1 to 2% of all extra-pulmonary cases. The association of different anatomo-clinical forms of cutaneous tuberculosis in the same patient is exceptional. There are only three cases in literature describing association between scrofuloderma with lupus vulgaris. Herein, we present the fourth case of scrofuloderma associated with lupus vulgaris.

Materials & Methods:
Case report:
A 43-year-old man, was admitted for two painless ulcerative tumors, one in his right armpit and the second one in his right wrist, progressively evolving for 30 years and increasing in size. He received a lot of antibiotics, without any improvement. 28 years later, he reported the appearance of new nodules on his right cheek, left arm and right thigh. He had no previous history of immunosuppressive therapy, weight loss, fever or cough.

Examination revealed in the right armpit an irregular, firm, purple ulcerative tumor, measuring 10cm of diameter with a purple nodule on its upper part. In the right wrist, he presented an irregular, firm, purple eroded tumor, measuring 7cm of diameter. Three erythematous, firm, nodules were seen on his right cheek, left arm and right thigh. He presented rigt axillary lymphadenopathy.

Skin biopsy showed epithelioid and gigantocellular granulomas dermatitis with onset of necrosis.

QuantiFERON-TB Gold test and the polymerase chain reaction on biopsy was positive to tuberculosis and the culture of the lesion was also positive for Mycobacterium tuberculosis.

Ultrasound of lymph node showed a lymph node in favor of a tuberculosis origin.

Chest X-ray, X-ray of the right wrist and left arm were normal, also magnetic resonance imaging of his forarm.

A final diagnosis of scrofuloderma on axillary tuberculosis adenitis was made associated to an ulcerated vegetative lupus vulgaris.

Treatment with isoniazid, rifampicin, ethambutol, and pyrazinamide was started for two months then followed by isoniazid plus rifampin given for an additional four months. The evolution was marked by a complete regression.

Results:
The cutaneous form of tuberculosis has varied clinical presentations, which is determined by both route of infection and status of cellular immunity of the host. The association of different anatomo-clinical forms of cutaneous tuberculosis in the same patient is rarely seen. Only 3 cases in the literature described association...
between scrofuloderma with lupus vulgaris. In our knowledge, our patient is the fourth case. In our opinion, this association is linked to the long course of the untreated lymph node disease.

Scrofuloderma results from contiguous tubercular involvement of the skin from an underlying infected structure, in our case it was secondary to a tuberculous adenitis. While lupus vulgaris is acquired either exogenously by direct inoculation or endogenously by hematogenous or lymphatic spread of Acid Fast Bacilli.

The ulcer-vegetative aspect is rare, as well as the association of a paucibacillary and multibacillary form which makes the particularity of this observation.

**Conclusion:**

The diagnosis of cutaneous tuberculosis must be clinically suspected in the presence of any destructive or verrucous skin lesion evolving without healing over a long period. There are only a few cases in literature which describe scrofuloderma along with lupus vulgaris, which make this case special.
Abstract N°: 1783

Facial lymph node tuberculosis revealed by a cheek nodule

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Introduction & Objectives:

Tuberculosis accounts for 5% of chronic cervical lymphadenopathy and constitute the preferential localization of peripheral tuberculous lymphadenitis. The posterior triangle is most frequently affected. Only Biopsy of the lymph nodes confirm the diagnosis. We report a new case of this pathology, which is interesting because of its rare location.

Materials & Methods:

We present a case of a 7-year-old patient who presented to our clinic with the complaint of facial mass in the right cheek. It was painless and with no local inflammation signs. The lesion had more than 3 cm in size.

Results:

According to the physical examination and the macroscopic aspect, the lesion was diagnosed as a fibrous tumor, but the histological analysis concluded to tuberculosis.

Conclusion:

Tubercular lymphadenopathy is the most common extra-pulmonary form of tuberculosis and commonly affects cervical lymph nodes, especially in immunocompromised patients, particularly those with HIV infection.

Careful clinical examination should be able to reveal the diagnosis. Fine needle aspiration cytology is extremely sensitive and highly specific investigation for early diagnosis.

Appropriate diagnosis and prompt treatment can improve the overall health of the patient and can prevent him/her from developing any systemic complications of tuberculosis in future.
The Elusive Diagnosis of Recurrent Reactive Infectious Mucocutaneous Eruption (RIME) secondary to Chlamydophila pneumoniae Infection in an Adult

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Abstract N°: 1806

Introduction & Objectives: The terminology used to describe the clinical syndrome characterized by acute mucositis with minimal or absent skin involvement has been debated over time. The condition has been given various names, such as Mucosal Respiratory Syndrome, Atypical/Incomplete Stevens-Johnson or Erythema Multiforme (EM) without skin lesions. In 2015, Canavan et al. proposed the term Mycoplasma-Induced Rash and Mucositis (MIRM) to describe a milder mucocutaneous disease associated with M. pneumoniae infection, which can be distinguished from drug-induced SJS or viral-associated EM. However, it was not until 2019 that the Paediatric Dermatology Research Alliance proposed the term Reactive Infectious Mucocutaneous Eruption (RIME) to describe MIRM-like eruptions caused by any microorganism.

Results: We present the case of a 50-year-old male with no significant medical history who presented twice to the emergency department with symptoms of upper respiratory infection and acute mucositis without cutaneous involvement. He had multiple ulcers throughout the oral and oropharyngeal cavities with yellow exudate and abundant secretions. The patient also had lower and upper lip erosions with large hematic crusts, as well as genital and conjunctival mucosal involvement. The patient was diagnosed with RIME associated with Chlamydophila pneumoniae infection in both cases. The patient responded positively after empirical treatment.

Discussion: The inconsistent terminology surrounding RIME has contributed to its underreporting. RIME is more commonly observed in pediatric populations and may be recurrent. There are only six published cases of RIME secondary to Chlamydophila pneumoniae infection in the literature, and only one in a young adult. Thus, RIME can pose a diagnostic challenge, especially when it occurs in adults. Recognizing RIME and its potential etiologies offers benefits for immediate and long-term management. Considering Chlamydophila pneumoniae infection as a potential cause of RIME may facilitate the diagnosis process.

Conclusion: RIME is an underrecognized clinical presentation that creates a diagnostic difficulty, especially in adults. Enhancing understanding of this pathology is crucial to ensure its prompt and effective inclusion as a differential diagnosis. Recurrent RIME is of particular interest from the patient’s perspective because early recognition and management of recurrences are critical in reducing the frequency and duration of admissions.
Introduction & Objectives:

Leprosy has been associated with stigma throughout history. Stigma, including self-stigma (shame), social exclusion and discrimination remain a reality for many affected persons. The causes and determinants of stigma include manifestations of leprosy, cultural and religious beliefs, fear of transmission, and public health interventions. Contagion is a recurrent theme in cinema. Leprosy, like tuberculosis, is the main or secondary subject of many films. However, its representation in cinema can contribute to maintaining myths in the collective unconsciousness, such as the fear of excessive contagiousness and the need to maintain distance with patients.

Materials & Methods:

The author has reviewed here a personal selection of films, illustrating the various representations of leprosy in cinema. This review does not claim to be exhaustive. Documentaries on leprosy have been excluded.

Results:

The films about leprosy have been classified in 5 groups:

1. Remote leprosy in peplum movies such as in Ben-Hur** (William Wyler, 1959), The Tiger of Eschnapur & The Indian Tomb (Fritz Lang, 1959) or more recently Risen (Kevin Reynolds, 2016)
2. Hidden leprosy of historical fictions such as in Braveheart (Mel Gibson, 1995) or in Kingdom of Heaven (Ridley Scott, 2005)
3. Leprosy on display in Papillon (Franklin J. Schaffner, 1973)
4. Realistic leprosy in biopics (Molokai by Paul Cox, 1999)

Conclusion:

This small selection of films illustrates the various representations of leprosy in cinema. Leprosy is sometimes hidden, sometimes fully displayed. When it is hidden, a certain distance is imposed on the lepers, emphasizing their isolation, and implying that they are easily contagious. When leprosy is visible, lepers always display full blown and extensive lesions, with facial lepromas, digital amputations, or other significant grade 2 joint or ocular disabilities. Some of these films are classics that are aired repeatedly still nowadays. One might therefore rightly ask what impact this outdated representation of leprosy has on today’s viewers.
Abstract N°: 1833

ZOONOTIC TRANSMISSION OF FACIAL SPOROTRICHOSIS EADV2023

Matheus Alves Pacheco* , Tatiana Titericz , Amanda Pereira , Gabriella Funchal , Fernanda E Lima , Vanessa Maciel , Athos Martini

Introduction & Objectives:

Sporotrichosis is a subcutaneous mycosis caused by dimorphic fungi of the genus Sporothrix. The disease has been increasingly reported in the Southern and Southeastern regions of Brazil, mainly associated with feline transmission. This report highlights the zoonotic transmission of sporotrichosis and its impact on human health.

Materials & Methods:

A case report is presented of a 7-year-old female patient with an 18-day history of erythematous plaque on the right nasal wing, measuring approximately 3 cm in diameter, with some crusts. No lymphadenopathy or mucosal abnormalities were observed. Histopathological analysis revealed granulomatous dermatitis consistent with an infectious etiology. During the investigation, a sick family cat with a lesion on the scrotal sac was also identified. Fungal culture on Mycosel agar isolated filamentous phase Sporothrix schenckii from the complex. Microculture slide stained with lactophenol revealed filaments with spores arranged in a “daisy-like” pattern.

Results:

The increased number of sporotrichosis cases, particularly associated with feline transmission, indicates a hyperendemic situation in the long term. Domestic cats are the main reservoirs, and transmission can occur through scratches or bites from the infected animal, as well as contact with secretions carrying the microorganism.

Conclusion:

Sporotrichosis is considered a long-standing hyperendemic disease, with feline transmission being the main source of infection. The zoonotic nature of the disease emphasizes the importance of preventive measures, such as avoiding contact with infected cats and promptly treating affected animals. Awareness of the zoonotic potential of sporotrichosis is crucial for early diagnosis and appropriate management, especially in regions where the disease is endemic.
Abstract N°: 1914

Atypical hand, foot and mouth disease in an adult presenting as symmetrical vesicles on both earlobes

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Title: Atypical hand, foot and mouth disease in an adult presenting as symmetrical vesicles on both earlobes

Introduction:

Hand, foot and mouth disease (HFMD) is a common, self-limiting, viral disease characterised by maculopapular lesions with vesicles on hands and soles of the feet and painful oral ulcerations. It predominantly affects children under the age of ten and it is caused by different types of human enteroviruses and coxsackieviruses. It occurs sporadically worldwide with outbreaks that are most frequent during warm weather. It is transmitted via different routes and is highly contagious, spreading rapidly among family members. On the other hand, HFMD is less common in adult patients, especially in immunocompetent individuals and it more frequently presents with an atypical clinical presentation.

Results:

We herein present a 30-year-old Caucasian male with no significant medical history that presented at our outpatient clinic with burning and non-itching lesions on his fingertips, soles and ears, which appeared two days prior. His symptoms started with a fever up to 39°C, sore throat, malaise and myalgia in concurrence with the skin lesions. He tested negative twice for COVID-19 infection and was prescribed systemic antibiotic treatment with amoxicillin and was since asymptomatic.

The clinical examination revealed symmetrical nonblanching elongated oval erythematous small macules, maculopapules and rare vesicles in regression on his fingertips. The lesions were arranged according to finger pad ridges. Similar, but fewer, lesions were present on soles of the feet, especially on the heels. On his earlobes, there were small, but clearly visible vesicles filled with serous fluid and some serous crusts. On the other hand, on his trunk and proximal parts of the extremities, there was a typical viral exanthema consisting of small nonscaling erythematous macules and fever maculopapules. There was no enanthema or other lesions on his oral mucosa or on the face. Laboratory findings did not reveal any clinically significant findings, besides a slightly elevated CRP and quite high number of reactive lymphocytes. A swab for enteroviral RNA was positive from the fingertips.

Based on enteroviral RNA isolation and clinical presentation a diagnosis of atypical HFMD was made with an accompanying typical maculopapular rash. He was treated with a topical fusidic acid cream, to prevent bacterial superinfection. He was advised to take antihistamine tablets, if needed, according to pruritus and to take medical leave, until regression of vesicles was observed. On control examination 10 days later, all his skin changes disappeared and his control laboratory workup was completely within normal range.

Conclusion:

To the best of our knowledge, this is the first case of HFMD presenting as vesicles symmetrically affecting the earlobes of a healthy adult, without affecting the face or oral mucosa. We would like to stress out the importance of a detailed clinical examination in order not to miss vesicles in atypical locations, as presented in our patient.
Furthermore, atypical HFMD should be considered as a differential diagnosis in a wide variety of exanthemas and enanthemas and swabs for enteroviral RNA identification should be collected in patients with acute fever and vesicular lesions in order not to miss this diagnosis.
Abstract N°: 1990

Treatment of Plane Warts with Long Pulse ND - YAG Laser 532 nm.

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Introduction & Objectives:

Warts are one of the contagious viral diseases that may cause disturbing cosmetic problems. Plane warts represents a common self-limiting viral infection of the skin caused by the Human Papilloma Virus, however, those that do not disappear by themselves can be very difficult to treat with no uniformly effective treatment modality.

Objective: To assess the efficacy of long pulsed 532 nm ND:YAG laser in the treatment of plane warts.

Materials & Methods:

In this therapeutic clinical trial study, thirty-four patients with plane warts were enrolled. Each patient was eligible for up to three treatment sessions administrated at 2 weeks intervals with long pulsed ND:YAG laser at a spot size 3mm; wavelength 532nm; pulsed duration 20msec; and fluence 30 J/cm2. The patients were assessed before each treatment session and at 3 months after the last treatment session.

The response to treatment was graded using 4 points scale:

Scale 1 = poor: <25 %,
Scale 2 = fair: 25–50 %,
Scale 3 = good: 51–75 %,
Scale 4 = excellent: >75 %.

Results:

Twenty-two patients only with a total of 478 lesions, completed the study; their ages ranged from (6-45) years with a mean ± SD 19.95±13.142 years. Thirteen patients (59.09%) were female and nine(40.90%) were male. The results from this study showing that long pulsed ND:YAG laser 532 nm led to an excellent response in 19 patients (86.36%) in which 15 of 19 patients showed a complete response (78.94%); one patient showed a good response (4.54%), one showed a fair response (4.54%) and one showed a poor response (4.54%) at the end of three-months follow up. The difference was statistically significant; the P value at the three months follow-up was 0.002. The cumulative clearance rate after the first, second, and third treatment sessions was 58.4%, 77.7%, and 89.9% respectively. Recurrence was seen in only one patient (4.54%). Side effects were generally mild and didn’t prevent normal activity.

Conclusion:

long pulsed ND:YAG laser 532nm appears to be an effective method for treatment of plane warts.
Abstract N°: 1991


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Introduction & Objectives:

Verruca vulgaris is a common dermatological problem. The conventional treatments for verruca vulgaris are usually invasive, low efficacy, and need a long recovery period.

Aims of study is to evaluate the effectiveness and the safety of long pulsed Nd:YAG laser 1064nm in the treatment of verruca vulgaris.

Materials & Methods:

In this therapeutic clinical trial, thirty five patients with a total of 105 lesions were enrolled. Each patient was eligible for up to three treatment sessions at 2 weeks interval with long pulsed Nd:YAG laser. All verrucae were evaluated before every session and three months after the last treatment session.

The response classifies as complete (when there is complete disappearance of lesions), no response when there was no change, and partial (when the reduction in verruca size 50% or greater).

Results:

complete response was seen in 96 (91.43%), partial response in 4 (3.81%), and no response in 5 (4.76%) verruca. The cumulative clearance rate after first, second, third treatment sessions was 60%, 80%, and 91.43 % respectively. At end of follow up, relapse rate was 2.08%. Side effects were generally mild and did not prevent normal activity.

Conclusion:

long pulsed Nd:YAG laser (1064nm) appears to be effective and safe for treatment of verruca vulgaris.
Case series of Chromoblastomycosis: a challenging disease

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Introduction & Objectives:

Chromoblastomycosis is a chronic, granulomatous and suppurative fungal infection that affects the skin and hypodermis, characterized by the presence of pigmented muriform cells in tissue. It is an implantation mycosis, which develops at the site of previous transcutaneous trauma and is caused by dematiaceous fungal species that are mostly found in tropical and subtropical regions. Chromoblastomycosis is strongly associated with agricultural activities, the majority of patients being men of working age. The objective of this case series is to provide information about the epidemiology, mycological diagnosis, treatment and follow-up of five patients diagnosed with Chromoblastomycosis in a Dermatology reference hospital in the south of Brazil.

Materials & Methods:

Case series of patients diagnosed with Chromoblastomycosis by skin biopsy and culture from 2014 to 2022 in a reference dermatological hospital in the south of Brazil. Epidemiological data such as age, gender and profession were collected, as well as established treatment and clinical response. Five patients with at least five years of follow-up and description of the fungal species were included. Informed consent was obtained from the participants.

Results:

All patients were male with agriculture-related professions, average age of 62,4 years. Lesions were in hand/forearm (60%), foot (20%) and hip (20%), presenting as verrucous plaques with scarring areas, average size of 18,8cm. Mean time of evolution was 14,2 years. Cladosporium sp., Phialophora sp. and Fonsecaea sp. were isolated. Treatment varied from systemic antifungals alone or combined with liquid nitrogen cryotherapy in monthly sessions. Three patients (60%) treated with itraconazole 200-400 mg/d combined with liquid nitrogen cryotherapy had a better outcome, reducing the size of active lesions by at least fifty percent in no less than one year of treatment; the other two patients had satisfactory responses with intravenous amphotericin B 50mg/d for a month and fluconazole 150 mg twice a week as long-term maintenance treatment, but none achieved sustained clinical cure.

Conclusion:

Chromoblastomycosis remains a challenging and underreported disease. Our case series, although with a small number of patients, corroborates the literature in demonstrating that Chromoblastomycosis lesions are recalcitrant and extremely difficult to eradicate, with better response to long systemic and combined treatments. The reason why clinical cure was not reached in the patients of this case series may be due to the disease’s long evolution, large size of the plaques and poor economic conditions, leading to treatment interruptions. Chromoblastomycosis requires long-term treatment that is very costly, especially for patients living in a country with limited economic resources and difficulty accessing a specialist.
Abstract N°: 2108

The menace of unrestricted OTC-like use of voriconazole for superficial fungal infection in Bangladesh.

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Introduction & Objectives: Currently the world is at a threat of emerging resistant fungal infection having only few classes of available antifungal drugs. Voriconazole is a systemic antifungal agent usually a reserve drug for aspergillosis, systemic candidiasis and invasive fungal infection; its unrestricted irrational use is a novel unacceptable emerging scenario in Bangladesh. Voriconazole was introduced in the Bangladesh market in 2018, over the last five years Bangladesh has become world’s one of the top three importers of voriconazole. Voriconazole is not an export item of Bangladesh, so the whole bulk of imported reagents are used for domestic use. The current survey was conducted to see the prescription pattern of antifungals agents specially voriconazole in the treatment of dermatophytosis.

Materials & Methods: History of antifungal therapy was taken from 350 patients of dermatophytosis who had taken at least one antifungal agent for the current disease episode. Patients were enrolled from the dermatology outpatient department (OPD) of three hospital of Bangladesh. Information was taken with verbal consent of the patients and the study was approved by the institutional review board of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh.

Results: Oral terbinafin (41.7%) and itraconazole (33.4%) were the commonly used agents followed by voriconazole (30.3%). In 53.8% cases voriconazole was prescribed by dermatologists, 26.4% by other specialists or general practitioners, 30.2% by non-registered practitioners or quack or pharmacy owner and in 12.3% by self.

Conclusion: Irrational and OTC-like use of voriconazole for less serious superficial fungal infection in Bangladesh is alarming. This unusual and unacceptable practice can create a dangerous resistance of a life saving drug.
Abstract N°: 2220

Cutaneous Leishmaniasis associated with TNF-α Inhibitors

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Introduction & Objectives:

Tumor necrosis factor (TNF)-alpha inhibitors are drugs widely used in dermatology that have revolutionized the treatment of diseases such as psoriasis and hidradenitis suppurativa.

Methods & Results

We present the case of a 62-year-old patient followed by extensive plaque psoriasis with joint involvement who, after six months of being medicated with adalimumab and having achieved complete remission, developed an erythematous skin lesion on the left leg. The patient had a history of type II diabetes mellitus, arterial hypertension, and dyslipidemia and denied relevant environmental exposures. On physical examination, an erythematous nodule with an eroded center of 2 centimeters (cm) was observed on the lateral side of the left leg. The lesion, which had evolved for about two months, was interpreted as a furuncle, and the patient was medicated with amoxicillin and oral clavulanic acid without resolution of the lesion. One month after the first observation, the lesion had increased in size, and a 3 cm, nummular, ulcerated plaque was now identified, with erythema, edema, and surrounding heat. The patient still had no psoriasis lesions on the rest of the skin. An incisional biopsy was performed, and the histological result revealed psoriasiform alterations associated with cytoplasmic inclusions suggestive of amastigotes. A new biopsy was performed for microbiological analysis, confirming localized cutaneous leishmaniasis caused by L. donovani. Adalimumab was suspended, and the patient started treatment with liposomal amphotericin B, 1.5mg/kg, with complete resolution after three months. Risankizumab was started with good results due to the aggravation of psoriasis, and no recurrence of leishmaniasis occurred for up to one year of follow-up.

Conclusion:

This case stands out due to the rarity and complexity of the diagnosis. The infectious risk these agents entail has been progressively identified, and patients undertaking these drugs should have a tighter follow-up compared to newer biological drugs (IL-17 and IL-23 inhibitors). Risankizumab presents a valuable alternative with a good safety profile in patients with leishmaniasis. Opportunistic infections should always be considered in atypical, unresolvable lesions with poor response to treatment.
Subungual lesion as an initial dermatological manifestation of lymphocutaneous sporotrichosis

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Introduction & Objectives: Sporotrichosis is a subacute-to-chronic dermatologic infection caused by the dimorphic fungus Sporothryx complex, which is found worldwide. The most common presentation is the lymphocutaneous form, which most frequently affects the extremities, mainly the hands and forearms, which are the most exposed sites to trauma. We report a case of lymphocutaneous sporotrichosis presented as an initial subungual lesion.

Materials & Methods: Retrospective medical record review for a case report.

Results: A female patient, 55 years old, went to the emergency service due to purulent subungual secretion on the right thumb. Although antibiotic therapy was started, the patient developed edema of the hand and forearm, associated to a subungual vegetative ulcerated lesion, which led us to consider cellulitis as the main hypothesis. During hospitalization, she developed eritematous subcutaneous nodules, with lymphadenopathy in an ascending distribution along the affected arm. Skin biopsy was performed, and fungal culture grew Sporothrix sp, which confirmed the diagnosis of sporotrichosis. Oral itraconazole was started, achieving complete response after 6 months of treatment.

Conclusion: Although very uncommon, the sporotrichosis can be sub or periungual and must be considered as a differential diagnosis on subungual ulcerated vegetative lesions even when located on unusual topography, as reported on this present case.
Abstract N°: 2442

**Scabies in a Patient with hydatidiform mole treated with Methotrexate – A Case Report**

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**Introduction & Objectives:**

Hydatidiform mole is a rare complication of pregnancy that can lead to the development of gestational trophoblastic neoplasia. Intramuscular methotrexate is a common treatment option for molar pregnancy, which works by inhibiting the growth of the abnormal cells. Sometimes, different skin diseases can occur as a consequence of immunosuppression-induced by methotrexate and it requires a correct diagnosis and adequate management.

**Materials & Methods:**

We present a case of a 15-year-old girl who developed scabies during her treatment for molar pregnancy treated with methotrexate. The patient was admitted to the hospital with intense abdominal pain one month after the curettage for molar pregnancy. Multiple pulmonary metastases and a complete Hydatidiform mole invasive and metastatic stage 3 FIGO were diagnosed. During the treatment, the patient presented pruritus, especially at night, and erythematous papular exanthem. Based on the clinical aspect and the parasitological examination of the lesions, the diagnosis was scabies. The recommended treatment was benzyl benzoate 25% applied at night in 5 consecutive evenings, bed and body deworming and simultaneous treatment of all family members. The methotrexate treatment (55 mg on days 1-3-5-7 of the cycle) and Folcasil (15mg intravenous on days 2-4-6-8 of cycle) were continued and although successfully reduced the HCG levels, the scabies did not improve and became more severe and atypical with many vesicles, papules-pustules and crusts. After six months of treatment with different antiparasitic cures (sulfur ointment, benzyl benzoate 25%), the scabies had not resolved, indicating that the methotrexate administration hampers the remission of lesions.

**Results:**

It is crucial to be aware of the potential secondary skin parasitic infection in treatment with methotrexate and to consider alternative therapeutic options for patients with molar pregnancy and coexisting skin conditions (Ivermectin tablets and permethrin cream 5%).

**Conclusion:**

In conclusion, this case report highlights the challenges of managing infectious dermatological conditions in oncologic patients, particularly when methotrexate must be administered as a mandatory regimen.
Abstract N°: 2450

Standardized cotton swab sampling with nested quantitative polymerase chain reaction is effective for diagnosing ordinary scabies

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Introduction & Objectives:
Low sensitivity of the polymerase chain reaction (PCR) assay for diagnosing scabies has been pointed out due to the difficulty in obtaining tissue containing Sarcoptes scabiei DNA.

To evaluate nested real-time quantitative PCR (nRT-qPCR) with non-expert dependent standardized cotton swab sampling (CSW) as a tool for diagnosing scabies.

Materials & Methods:
All patients underwent dermoscopic and microscopic examination (MS) with scraped samples (Sc). Patient samples were acquired with a single, dry swab rubbed across the flexor areas of both wrists as well as the 8 interdigital spaces and on any suspected scabies lesions. nRT-qPCRs were performed with scraped and CSW samples.

Results:
Out of 125 patients with suspected scabies, 120 patients were sampled, and 57 were positive (MS positive n=53, nRT-qPCR with Sc positive n=52, nRT-qPCR with CSW positive n=46) and 63 were negative for scabies. The sensitivities of these tests were 93.0%, 91.2% and 80.7%, respectively, which were not different statistically (p > 0.05). However, upon subsequent monitoring after treatment, the sensitivity of nRT-qPCR with CSW was only 36.6%, which was significantly lower than 83.0% for MS and 92.7% for nRT-qPCR with Sc (p = 0.00, respectively). The obtained sequences showed 97% to 100% homology with scabies sequences deposited in GenBank.

Conclusion:
CSW with nRT-qPCR shows sensitivity close to microscopic examination with scraping performed by experts as diagnosing scabies in an outpatient setting, but not for post-treatment monitoring. CSW with nRT-qPCR may be useful for physicians unfamiliar with a traditional diagnostic method, and for screening an outbreak in community facilities.
Abstract N°: 2462

**Hands and wrists are the best sites for diagnosing scabies through dermoscopy and microscopy**

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**Introduction & Objectives:**

Mineral oil examination is a gold standard in diagnosing scabies. Using dermoscopy, the sensitivity of microscopic examination can be increased. However, the part of the body effective in diagnosing scabies is unclear.

To determine whether examining the hands (including the wrists) is more sensitive than testing other body areas in diagnosing scabies infestation.

**Materials & Methods:**

Patients with suspected scabies underwent a dermoscopic examination (DS) and dermoscopy-oriented microscopic examination (DS-oriented MS). First, the hands (including the wrists) were examined, and if sufficient samples for diagnosis were not obtained, other body parts were examined. The results were recorded for each body area.

**Results:**

Of 359 patients, 176 were positive in the DS-oriented MS and 183 were negative. The sensitivity of the DS performed on the hands (including the wrists) and other body parts were 85.0% (95% CI 78.6-91.4) and 67.1% (95% CI 55.4-78.8), respectively, when the sensitivity of the DS-oriented MS performed on the hands (including the wrists) and other body parts were 92.2% (95% CI 87.7-96.7) and 70.0% (95% CI 58.5-81.5), respectively.

If all 359 patients are considered to have been tested in the hands (including the wrists), the sensitivity of the DS on the hands (including the wrists) were calculated to be 81.1% (95% CI 75.0-87.2) and the sensitivity of the DS-oriented MS were estimated to be 87.5% (95% CI 82.0-93.0)

**Conclusion:**

This study suggests that examining the hands and wrists in patients with suspected scabies is more sensitive and effective than other body areas. If the hands and wrists are first tested and other body areas are tested only if the result is negative, examining in an outpatient setting will be convenient and efficient.
Abstract N°: 2642

Leprosy-treated case series with descriptive nodal/paranodal characteristics

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Introduction & Objectives:

Introduction. Leprosy presents with neuropathy and neurological symptoms as anesthetized areas in the skin, stinging sensation, and pain in the nerves which could suggest earlier diagnosis of this disease. In general, nodal proteins have been studied as important targets to be pursued in the pathophysiology of neuropathy. Recent studies continue to support a direct role for autoantibodies in neuropathy pathogenesis and autoantibodies against paranodal proteins have been identified in inflammatory neuropathies. Inflammatory responses appear to be needed for the demyelination process, but information is scarce about the mechanisms involved in events of such neurological injury. Objectives. The aim of this study was to describe nodal/paranodal characteristics of a leprosy-treated case series.

Materials & Methods: These five leprosy-treated case series describe the demographics, clinical phenotypes and histopathological changes of nodal/paranodal architecture. We analyzed the myelinated fibers from skin biopsies of five leprosy-treated patients by immunofluorescence double labeling with antibodies against Caspr (anti-caspr) and myelin basic protein (anti-MBP) to assess nodal/paranodal architecture.

Results:

Four patients presented elongated nodes of Ranvier, three patients presented alterations in the distribution of paranodal protein caspr and two patients presented both aforementioned potential features of demyelination in leprosy (Table 1).

Conclusion:

Although these cases were not tested for serum antiparanodal antibodies, the nodal and or paranodal histopathological alterations could be indicative of a possible mechanism for neural lesions in leprosy disease. Therefore, more cases and at different stages of leprosy need to be studied, especially because the leprosy neuropathy provoke more of 8 000 people with visible and irreversible disabilities for year and the dermatologists need to think about leprosy during their medical history assessments.

Key Words: Leprosy neuropathy, skin biopsy.

Table 1. Descriptive nodal/paranodal characteristics of five case Leprosy-treated by pain, age, sex, neurological exam, localization, and time treatment to skin biopsy.

<table>
<thead>
<tr>
<th>Leprosy type</th>
<th>Pain/nerve localization</th>
<th>Age/Pain/sex</th>
<th>Time from between-the</th>
<th>Neurological exam</th>
<th>Slit-Hot fiber/Inclusion (or fibrils)</th>
<th>anti-MBP and Caspr characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multifocal</td>
<td>pain in right lower limb 30</td>
<td>23</td>
<td>6</td>
<td>normal reflexes, decreased superficial sensation, and cold sensation in involved areas of skin</td>
<td>50 mm above axillary level</td>
<td>elongated nodal architecture with Caspr and MBP</td>
</tr>
<tr>
<td>Facial/nerve</td>
<td>pain in left upper limb 40</td>
<td>40</td>
<td>40</td>
<td>normal reflexes, decreased superficial sensation, and cold sensation in involved areas of skin</td>
<td>50 mm above axillary level</td>
<td>elongated nodal architecture with Caspr and MBP</td>
</tr>
<tr>
<td>Facial/nerve</td>
<td>pain in right lower limb 35</td>
<td>27</td>
<td>27</td>
<td>normal reflexes, decreased superficial sensation, and cold sensation in involved areas of skin</td>
<td>50 mm above axillary level</td>
<td>elongated nodal architecture with Caspr and MBP</td>
</tr>
<tr>
<td>Facial/nerve</td>
<td>pain in right lower limb 36</td>
<td>26</td>
<td>26</td>
<td>normal reflexes, decreased superficial sensation, and cold sensation in involved areas of skin</td>
<td>50 mm above axillary level</td>
<td>elongated nodal architecture with Caspr and MBP</td>
</tr>
<tr>
<td>Facial/nerve</td>
<td>pain in right upper limb 35</td>
<td>35</td>
<td>35</td>
<td>normal reflexes, decreased superficial sensation, and cold sensation in involved areas of skin</td>
<td>50 mm above axillary level</td>
<td>elongated nodal architecture with Caspr and MBP</td>
</tr>
</tbody>
</table>
Abstract N°: 2650

Beri Beri as an outcome of malnourishment due to Paracoccidioidomycosis infection.

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Introduction & Objectives:
Paracoccidioidomycosis is a systemic mycosis that mainly occurs in endemic areas, such as South America. Brazil is known to have one of the highest prevalence rates of the infection caused by two dimorphic fungi: Paracoccidioides brasiliensis and Paracoccidioides lutzii. The disease can manifest ranging from asymptomatic and self-limited infections to a multi-systemic disease. Oral mucosal lesions can be found in up to 80% of the patients. Oral pain resulting from involvement is one of the most common complaints leading patients to seek medical evaluation.

Materials & Methods:
A 51-year-old male with a 5-year history of lesions in the oral cavity, which progressively led to the partial loss of some dental pieces, pain when chewing, difficulty eating and drinking liquids, important sialorrhea and loss of approximately 13 kg of weight during this period. The patient also reported a dry cough. During the physical examination, ganglionic masses were evidenced in the bilateral submandibular region and dermatological examination revealed plaques and ulcers, infiltrated, topped by serohematic crusts on the oral and gingival mucosa. The patient was hospitalized for investigation of systemic involvement.

Results:
A direct microscopy examination of the oral lesions was performed, revealing a pattern of multiple budding around the mother cell. The chest X-ray had symmetric reticulonodular diffuse and bilateral opacities. Additionally, the chest tomography scan showed findings suggesting an infectious granulomatous process, as well as the presence of bronchiectasis and areas of architectural distortion, indicating a subacute/chronic component. Abdominal tomography also showed involvement of the adrenal gland.

Based on the clinical findings and the results of the complementary tests, the diagnosis of paracoccidioidomycosis infection was proposed, with involvement of multiple sites.

An echocardiogram also allowed visualization of dilatation and dysfunction of the right ventricle. Because of this, a treatment with intravenous liposomal amphotericin B (3 mg/kg/day, with a cumulative dose of 3 grams) was initiated. The patient also received reposition of B1 vitamin due to the hypothesis of Cardiac Beri-Beri related to thiamine deficiency and presented a good therapeutic response with improvement of the heart function and reverse remodeling of the right ventricle even during hospitalization.

Conclusion:
Paracoccidioidomycosis findings in the oral examination include an infiltrative lesion with a fine granular surface (moriform stomatitis), the most common pattern, or ulcerative lesions with infiltrated borders.

Although paracoccidioidomycosis is endemic in South America, we present an unusual outcome related to
malnourishment: heart failure due to thiamine deficiency. Our aim is to alert clinicians in endemic countries to investigate other organ complications caused by nutritional deficiencies, to prevent further progression, and to possibly reverse the conditions for better morbidity and mortality outcomes.
Abstract N°: 2721

A cross-sectional study to evaluate the alteration of cytokine expression and activation of inflammatory pathway in response to NOD 1 and NOD 2 signal in leprosy

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Title-A cross-sectional study to evaluate the alteration of cytokine expression and activation of inflammatory pathway in response to NOD 1 and NOD 2 signal in leprosy

Introduction & Objectives: Leprae bacilli are identified as foreign by pattern recognition receptors (PRR) present in the microbes, but absent in host. The NOD-like receptor family (NLR) comprising the nucleotide-binding oligomerization domain (NOD1, NOD2) proteins are two well-known PRR. The objectives of this study were to study the expression of cytoplasmic NOD1 and NOD2 in the pathogenesis of leprosy, the serum level of expressed cytokines and to measure the mRNA expression.

Materials & Methods: A total of 457 clinically suspected Hansen’s patients were analyzed during a period of 4 years. Newly diagnosed leprosy patients were considered as leprosy disease control (LDC). The cases with active or new lesions and an increase in BI by at least 2+ 12 months after completion of MDT were considered leprosy disease relapse (LDR) cases. Age and sex-matched healthy individuals served as our control group (HC). ELISA was performed to measure the concentration of eight human cytokines including both pro-inflammatory (TNF-α, IFN-γ and IL-6), anti-inflammatory cytokines (IL-10), and one chemokine IL8. Quantitative expression of receptor genes (NOD1 and NOD2) and cytokine genes were evaluated by qRT-PCR. We studied NOD1, NOD2 expression in the tissues through Fluorescence Immune Histochemistry. Differential NLRs intracellular expression on peripheral blood monocytes (PBMC) and their response to stimulation with specific ligands (lipopolysaccharide, Muramyl dipeptide), were studied.

Results: A significant difference in the expression of NOD1 and NOD 2 genes was observed in unstimulated monocytes of the LDC and LDR cases when compared to HC. The LDC patients had a significantly higher level of pro-inflammatory cytokines than the HC.

Conclusion: In conclusion, this study has demonstrated the expression of both cytokines and chemokine in response to NLRs activation in skin of leprosy patients.

FIGURES

1A, 1B

NOD 1 expression in M. leprae infected patients skin
NOD 2 expression in M. leprae infected patients

Figure 3A, 3B: It represents the mRNA expression of NOD1, NOD 2 in the isolated cultured monocytes of HC, LDC patients and LDR cases with the respective effects of the ligands.

Figure 3C
Figure 3C: It represents the serum cytokine level for TNF-α in study subjects.

Figure 3D: It represents serum level secretion of IL-6 in study subjects.
Figure 3E: Shows serum level secretion of IL-8 in study subjects

Figure 3F: Shows serum level secretion of IFN-γ in study subjects

Figure 3G
Figure 3G: It represents mRNA expression of TNF – α from isolated cultured monocytes of HC, LDC, LDR patients

Figure 3H: Shows effect of ligands activation on mRNA expression of IL – 6 from the isolated cultured monocytes of HC, LDC patients and LDR cases
Figure 3I: Shows serum level secretion of IFN-γ in study subjects

Figure 3J: Shows effect of ligands activation on the mRNA expression of IL-8 from isolated cultured
monocytes of study subjects

Figure 3K

Figure 3K: Shows serum level secretion of IL-10 in study subjects

Figure 3L

Figure 3L: Shows serum level secretion of IL-10 in study subjects
Abstract N°: 2865

A cross-sectional study to evaluate the clinical and epidemiological profile of Hansen patients attending a tertiary care center in eastern India

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Introduction and Objectives: Leprosy is a disease with tremendous social repercussions since the patients are shunned by society. Since the introduction of the National Leprosy Eradication Programme (NLEP) in India in 1983, the number of leprosy cases has been significantly reduced and was eliminated in 2005. But there are some pockets of eastern India where the prevalence rate is still very high and continues to be a major public health problem. The study was conducted to evaluate the clinical and epidemiological profiles of leprosy patients attending a tertiary care hospital in eastern India.

Materials and Methods: A cross-sectional study was conducted to gather information from all patients who were diagnosed with leprosy and attended the facility from February to July 2019. The targeted sample size was 88, considering a 95% confidence limit, 10% allowable error, a 20000-population size, and a 35.67% response rate. Purposive sampling was done on a first-come, first-served basis. Patients of any age and both sexes who presented with leprosy were included. Detailed data regarding the demographic profile, clinical features, treatment, and complications were obtained and analysed using appropriate statistical methods.

Results: The mean age of the patients was 36.81 years, ranging from 9 to 72 years. It was more common among males (76.1%) in comparison to females (23.9%). 65.9% of patients were illiterate, 72.7% were from low socio-economic societies, and 76.1% of them were from a tribal population. The mean duration of disease before visiting the hospital was significantly higher (203.35 days) and was 403.89 days among patients with lepromatous leprosy. In the clinical disease spectrum, most of the patients were borderline tuberculoid (55.7%), followed by pure-neuritic (18.2%), borderline lepromatous (12.5%), and lepromatous leprosy (12.5%). 2.3% were relapse cases, and 1.1% were defaulters. 80.6% of patients had multi-bacillary and 19.3% had pauci-bacillary leprosy. 20.5% of patients presented with a lepra reaction; among them, 61.1% presented with a type 1 reaction, and 38.9% with a type 2 reaction. Type 1 reactions were more common in borderline tuberculoid leprosy (54.5%), whereas Type 2 reactions were more common in lepromatous leprosy (57.1%). Regarding disability, 31.8% of patients presented with a disability, of which 28.6% had a grade 1 disability and 71.4% had a grade 2 disability. Both types of disabilities were more common in the pure-neuritic variety (53.6%), followed by borderline tuberculoid (25%). 22.7% of individuals presented with deformities, among which tropic ulcer (28.5%) and claw hand (28.5%) were the most common.

Conclusion: After a decade of the post-elimination phase of the most stigmatized disease in India, we found that the prevalence of the disease is still very high in society. Negligence and lack of awareness lead to late presentation, causing severe deformity and disability. We consider more effective and efficient awareness campaigns and counselling involving more of the general population to alleviate the condition.
Abstract N°: 2911

Cutaneous actinomycosis: A case series

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Introduction & Objectives:

Primary cutaneous actinomycosis is a rare, granulomatous bacterial infection. The aim of this study is to investigate the epidemiological and clinical profile of actinomycosis diagnosed in our institution.

Materials & Methods:

This is a retrospective study conducted at the Dermatology Department between January 2007 and January 2021, including all patients with confirmed primary cutaneous actinomycosis.

Results:

Twelve patients were included (10 males and 2 females), with a mean age of 38 years, of whom six were of rural origin. Localization on the lower limbs was noted in 9 cases, the upper limb in 1 case, the lower back in 1 case, and the cheek in 1 case. 83% reported a history of previous trauma. The mean duration of evolution was 5 years. The presence of fistulas was noted in all patients, and the notion of emitting whitish grains was noted in seven patients. The diagnosis was made by the pathologist in 7 cases and by the microbiologist in 5 cases. Bone involvement was present in four patients. All patients were treated with a long-term combination of penicillin G and trimethoprim/sulfamethoxazole. One case of drug rash and one case of hemorrhagic cystitis due to penicillin G were noted, and another patient followed for chronic kidney failure under hemodialysis had presented with acute pulmonary edema requiring discontinuation of intravenous therapy and switching to an oral amoxicillin-clavulanic acid combination. Five patients underwent additional surgery.

Conclusion:

Cutaneous actinomycosis is a chronic and extensive suppurative infection caused by a gram-positive anaerobic filamentous bacterium that is saprophytic in the oral cavity and gastrointestinal tract. The therapeutic approach mainly relies on antibiotics. The choice of antibiotic should take into account the site of infection, the sensitivity of the accompanying flora, the severity of the condition, and the patient’s response. In our series, the majority of patients responded well to medical treatment combining two antibiotics at high doses for a prolonged period. Our findings are consistent with the literature.
Insect bite induced hypersensitivity: A Case Series

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Title:

Insect bite induced hypersensitivity: A Case Series

Introduction & Objectives:

Insect stings can occur in persons of any age, especially after multiple stings. Systemic reactions to insect stings are estimated to occur in 3 percent of adults; approximately 1 percent of children have a medical history of severe sting reactions. Large local reactions are more common than systemic reactions and are mediated by IgE in up to 85 percent of cases.

Materials & Methods:

We present six reported cases of insect bite hypersensitivity. Three patients had edema around the eyes, 1 patient had angioedema and vesicular pruritic papules on the face and 2 patients had vesicular pruritic papules on the neck and trunk. The patients were followed clinically for a week. Treatment consists of second-generation antihistamines and topical oral steroids. Insect bites should be washed with soap and water to prevent secondary infection. In patients with infection antibiotic oral were also given.

Results and Discussion:

The diagnosis of insect bite hypersensitivity rests on history because positive test results can occur in persons who do not react to insect stings. Insect bites produce an inflammatory or allergic reaction with variable responses. Reactions can vary from no reaction to pruritic papules, vesicles, or even bullae in some cases. It is thought that the saliva from the bite of the organism serves as an allergen. While the exact pathophysiology is not well understood, the reaction is thought to be mediated in the majority of cases by histamine release either from the saliva and/or IgE-mediated hypersensitivity reactions. IgE-independent pathways are associated with delayed reactions. However, other non-histaminergic itch mediators such as leukotrienes, proteases, and type 2 cytokines may have a role. When there is only limited allergen exposure, the response is typically mild, but when the antigen exposure is more considerable a vesiculobullous reaction can occur. The bullous-type reaction is a delayed response hypersensitivity reaction occurring in sensitized individuals. Because insect bite hypersensitivity is ubiquitous with significant induction of worldwide disease burden, it is critical for healthcare providers to recognize how to prevent and treat these bites.

Conclusion:

Insect bite hypersensitivity is ubiquitous with significant induction of worldwide disease burden, it is critical for healthcare providers to recognize how to prevent and treat these bites.
A case of Herpes Vegetans on Chin in Patient with acute myeloid leukemia Receiving Azacitidine

Se Uk Oh, Sun Gyu Kim, Ji Hun Park, Hyun-Min Seo, Joung Soo Kim

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Introduction & Objectives:

Herpes simplex virus (HSV) is a common viral infection affecting the oral and anogenital regions. Reactivation of HSV-1 can occur due to various triggers, leading to the formation of red macules that rapidly become vesicular, form pustular scabs, and ulcers on the mucocutaneous junction of the lips. Herpes vegetans is a rare presentation of herpes simplex virus, which appears as a mass, tumoral, or hypertrophic lesion, primarily affecting the anogenital region of patients with a history of long-term immunodeficiency or human immunodeficiency virus (HIV) patients.

Materials & Methods:

A 72-year-old man presented with a solitary erythematous tender nodule on his right chin. He was diagnosed with acute myeloid leukemia (AML) and started receiving azacitidine treatment. The skin lesion appeared on the following day after initiating azacitidine treatment. Laboratory tests revealed a white blood cell count of 1.3 × 103/mm3 with absolute neutrophil count of 120/mm3, 65.0% blasts, hemoglobin of 11.9 g/dL, and platelet count of 5.4 × 104/mm3. A punch biopsy was performed on his right chin lesion.

Results:

Histological examination revealed ulcerative lesions with necrosis of the epithelium and vesicular formation. Enlarged epithelial cells whose nuclei were enlarged with moldering and displacement of chromatin to the periphery, and intranuclear inclusion bodies were seen. Based on these findings, he was diagnosed with herpes vegetans. The patient was treated with PO famciclovir and topical acyclovir for ten days, which resulted in the improvement of the skin lesion.

Conclusion:

Only one case of herpes vegetans on the orofacial area caused by HSV-1 has been reported, and this case also occurred in an AML patient who received azacitidine treatment. It is possible that azacitidine may contribute to the development of hypertrophic HSV-1 lesions, as the drug reduces the numbers of regulatory T, T-helper 1, and T-helper 2 cells in myelodysplastic syndrome patients. The increased secretion of proinflammatory cytokines associated with azacitidine therapy may have played a role in the development of the hypertrophic HSV-1 lesions. Therefore, herpes vegetans should be considered as a potential differential diagnosis in patients presenting with hypertrophic or verrucous lesions, particularly those with underlying immunocompromised states. Further research is necessary to better understand this rare manifestation of HSV infection and develop optimal treatment strategies.
Tinea incognito: A 10-year clinico-epidemiological study

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Introduction & Objectives: Tinea incognito is a dermatophyte infection with an atypical presentation due to incorrect treatment with corticosteroids, calcineurin inhibitors or in patients receiving immunosuppressive treatment. Given its increasing incidence, we propose to describe the clinical-epidemiological and mycological characteristics of this entity with a 10-year case series.

Materials & Methods: We collected all cases diagnosed with dermatophytosis by skin biopsy in our department between 2013 and 2023. We analysed the variables age, sex, form of presentation, location, clinical judgement prior to biopsy, treatments prior to biopsy, mycological study, prescribed therapy, and concomitant skin and systemic diseases.

Results: 29 patients were diagnosed with dermatophytosis between January 2013 and March 2023. 14 males and 15 females with a mean age of 58 years. The most frequent presentation was erythematous annular plaques distributed mainly on the lower limbs. In 75% of cases the patient had previously applied topical or oral corticosteroid. The most common microorganism isolated was Trichophyton rubrum and the most commonly used therapy was oral terbinafine and itraconazole.

Conclusion: Tinea incognito can be a great imitator of other entities such as seborrhoeic dermatitis, psoriasis, lichen planus, lupus erythematosus or folliculitis which involve treatments based on corticotherapy and calcineurin inhibitors that help to mask and chronify the clinical picture. The most frequently confirmed microorganism is Trichophyton rubrum, which usually has a satisfactory response to oral antifungals. We therefore consider that this entity should be taken into consideration in the presence of eczema-like erythematous lesions that do not respond to corticosteroids.
Introduction & Objectives:

Patients with chronic inflammatory diseases (CID) have an increased risk for infections. For patients with inflammatory bowel diseases (IBD) and rheumatological diseases (RD) there are European guidelines for vaccinations, but within dermatological diseases (DD) guidelines are missing despite of those patients using many of the same immunosuppressive treatments as IBD and RD patients.

The objective is to assess the knowledge and awareness of common vaccinations and extent of immunization among patients with CID in Denmark, Finland, Norway, Sweden (Nordics) and identify gaps between DD and RD and IBD disease groups.

Materials & Methods:

A structured anonymous survey for patients with CID (DD including atopic dermatitis (AD), psoriasis and other, IBD and RD) was conducted in 2022. The survey was answered by 1748 respondents (DD n=563, IBD n=543, RD n=1031).

Results:

Among respondents, 89% were female, 58% had disease duration >10 years, and majority had ongoing systemic immunosuppressive treatment (IT) (65%). Minority of the DD patients (38%), whereas majority of IBD (66%) and RD (59%) patients were treated in specialised care.

In total, 68% considered it important to get vaccinated due to their CID or treatment (DD 57%, IBD 61,3%, RD 74%). This despite that 63% stated they had not received any information regarding vaccinations at the start of their treatment, 44% considered the information on vaccinations related to their CID and treatment was difficult to find and 71% would like to receive more information.

Commonly recommended vaccinations in all disease groups vs. DD were COVID-19 (66% vs. 57%), influenza vaccination (IV) (63% vs. 50%) and pneumococcal vaccination (PV) (45% vs. 32%). This despite the age groups were somewhat similar in all disease groups. Comparing respondents ≥65 and <65 years in all disease groups, a difference was observed in how often IV (71% vs. 57%) and PV (57% vs. 38%) were recommended.

Only 22% had their vaccination status checked before initiating treatment; lowest in DD (16%) (Psoriasis 18%, AD 10%, other 19%) and highest in RD (25%). The vaccination rate among patients before start with treatment was highest for IV (44%) (COVID-19 30%, PV 27%, Herpes zoster vaccine (HZV) 0%). The vaccination rate among
patients while on treatment was highest for COVID-19 (74%) (PV 37%, IV 62%, HZV 1%).

Moreover, 64% (DD 71%, IBD 66%, RD 57%) did not have vaccination status assessed regularly. Eighty-six percent did not receive a vaccination plan in relation to their CID and treatment and 43% were dissatisfied with the follow-up of vaccination status. Respondents with DD of ≥65 years were more satisfied than those <65 years (28% vs. 17% very satisfied) and overall respondents with DD were least satisfied disease group compared to IBD or RD (20% vs. 25% vs. 33%).

Conclusion:

This Nordic survey provides insights on patients’ information needs and sources, and own experiences related to recommendations on vaccinations in relation to their CID and IT. The results confirm a gap between DD, RD and IBD, where in general higher vaccination rates are found among RD and IBD respondents. This, despite the age groups were somewhat similar in all disease groups, which demands for increased awareness among patients and HCP regarding vaccinations in DD. This is particularly important for DD patients 65 years and above who receive IT.

Figure 1. Awareness among patients with dermatological diseases on EULAR overarching principles and recommendations selected from the lay version of the EULAR recommendations for the vaccination of adults with autoimmune inflammatory rheumatic diseases.

| Patients with dermatological disease receiving systemic immunosuppressive treatment (IT), % |
|-----------------------------------------------|-----------------|----------------|----------------|----------------|----------------|
| When you go for a vaccine, you should always tell the doctor or nurse about your disease and any medicines you are taking. (n=220) | 68.2 | 11.8 | 14.7 | 3.3 |
| Most people with an autoimmune inflammatory disease should have the annual flu vaccine. (n=221) | 87.4 | 8.1 | 27.1 | 11.8 |
| Most people with an autoimmune inflammatory disease are recommended to have a pneumococcal vaccine. (n=221) | 52.9 | 7.7 | 14.5 | 24.9 |
| If you are at risk of getting hepatitis A or B, you should be vaccinated. (n=219) | 44.3 | 11.4 | 24.6 | 29.7 |
| If you are at risk of getting hepatitis A or B, vaccination can be considered. (n=220) | 78.6 | 17.7 | 11.4 | 32.3 |
| People with an autoimmune inflammatory disease should avoid vaccination against yellow fever. (n=221) | 11.3 | 6.0 | 7.2 | 79.2 |
| Other healthy people living with a person with an autoimmune inflammatory disease should stay up to date with their vaccinations. (n=221) | 28.5 | 14.5 | 10.9 | 41.5 |
| The vaccination status and indications for further vaccination in patients with autoimmune inflammatory disease should be assessed yearly by treating physician/specialist (n=220) | 23.5 | 13.2 | 19.1 | 34.2 |
| Vaccines should preferably be administered prior to planned treatment. (n=221) | 67.7 | 8.3 | 17.5 | 47.2 |
| If you are a new mother and were treated with a biologic medicine during the second half of your pregnancy, you should delay giving your baby a live vaccine until they are at least 6 months old. (n=221) | 15.6 | 1.0 | 8.0 | 77.2 |
Abstract N°: 3180

**Mucocutaneous Leishmaniasis: A Rare Entity in Algeria**

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**Introduction & Objectives:**

Leishmaniasis is a parasitic disease that can manifest as skin, mucosal, mucocutaneous, and visceral disorders. The cutaneous form is the most prevalent and endemic in the Mediterranean region, while the mucocutaneous form is exceptionally rare, with only a few reported cases in Tunisia, primarily presenting as labial lesions caused by Leishmania major. This report describes a unique case of mucocutaneous leishmaniasis in Algeria, initially misdiagnosed as granulomatous macrocheilitis of Miescher.

**Materials & Methods:**

A male patient, 28 years of age, had been under the care of the dermatology department for a duration of two years due to the presence of macrocheilitis, which was initially diagnosed as Miescher’s granulomatous disease. The patient presented with asymmetrical, dry, painless, non-pruritic macrocheilitis on the right edge of the lower lip, accompanied by wrinkled and scaly skin appearance. Ipsilateral jugal edema was also observed. Although the patient mentioned residing in an endemic Leishmanian zone, no history of insect bite was reported. A PCR test on a biopsy fragment was performed to reassess the diagnosis, confirming leishmaniasis. The identified species was Leishmania major. The patient was receiving Meglumine antimoniate at 60mg/kg/day for 15 days, followed by a second course of the same duration a month later. Long-term oral antiparasitic treatment (fluconazole at 100mg/day) was also prescribed. Subsequently, a significant improvement in macrocheilitis and a decrease in cheek edema were observed.

**Results:**

Mucocutaneous leishmaniasis, primarily caused by L. braziliensis, is endemic in Central and South America and often results in disfiguring and mutilating lesions, which are challenging to treat. However, such cases are rare in the Mediterranean region, with a few documented instances in Tunisia characterized by the absence of mutilating lesions and a favorable response to treatment. The diagnosis of mucocutaneous leishmaniasis can be made through direct examination, histological analysis, culture in NNN medium, or PCR. Leishmania major is the predominant species reported, followed by leishmania infantum. To our knowledge, no cases of mucocutaneous leishmaniasis have been previously reported in Algeria. Our patient’s case aligns with the Tunisian cases, showing a lack of mutilating lesions and a positive response to treatment. However, the mucosal involvement could be secondary to contiguous cutaneous involvement, and the associated cheek edema may be attributed to lymphatic compression from macrocheilitis.

**Conclusion:**

Although cutaneous leishmaniasis is the most common form in Algeria, clinicians should consider mucocutaneous leishmaniasis as a differential diagnosis for atypical chronic mucosal lesions with an unknown etiology. This consideration should prompt parasitological examinations to determine the leishmanian origin. Awareness of this rare entity and its potential presentations is crucial for accurate diagnosis and appropriate management.
Abstract N°: 3211

Facial disfiguring cutaneous lesions and central nervous system involvement with brown-black dematiaceous fungi in an immunocompetent patient

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Introduction & Objectives: Pheohyphomycosis is a rare heterogeneous group of mycotic infections caused by dematiaceous (phaeoid) fungi affecting the skin, subcutaneous tissue, and central nervous system.

Materials & Methods: A 20-year-old boy was seen in dermatology OPD with chief complain being swelling involving mid-face- nose and paranasal area, glabellar region -which was of three months duration. There was history of trivial trauma two times in last year before development of lesions. He also had two episodes of generalised tonic clonic seizures. As patient had this complain during COVID era, He was first evaluated in special Mucor mycosis ward for its high occurrence during that time. However, multiple culture report came negative for the same. Histopathology evaluation from cutaneous specimen were also inconclusive for two times showing granulomatous inflammation with abundant plasma cells; no organisms were detected on haematoxylin and eosin stain as well as by special stains. Ultrasonography of neck area revealed nodular goiter and lymphadenopathy. Magnetic resonance imaging (MRI) brain showed extensive osteomyelitis, cavernous sinus thrombosis. So, he was extensively investigated for lymphoma, granulomatosis polyangiitis and sarcoidosis. But all other investigations did not support any of the diagnosis. His serological status for human immunodeficiency virus was negative. So, a trial of itraconazole was given to which patient responded initially. But patient discontinued treatment after a month. His lesions became progressive (necrosis and ulceration were evident), and neurological condition deteriorated.

Results: Repeat MRI suggested multiple areas with altered intensity suggestive of tuberculoma or intracerebral fungal granuloma. Biopsy was repeated from nasal mucosa and this time revealed brown-black dematiaceous fungi. Genetic analysis revealed complement 8 deficiency type 2 and heterozygous mutation characteristic of Majeed syndrome. Patient was started on amphotericin B however, his multisystem involvement deteriorated very fast, and he succumbed to death.

Conclusion: This case is being presented for its rarity of central nervous involvement and fatality of infection in an immunocompetent patient.**
**Abstract N°: 3236**

**Tinea faciei - an extraordinary mimicker of multiple skin dermatoses**

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**Introduction & Objectives:**

Tinea faciei is an uncommon superficial dermatophytosis, related to the facial skin devoid of the terminal hair.* Tinea faciei accounts for about 3-4% of Tinea corporis. Regarding the epidemiological factors, some authors suggest that T. faciei is more prevalent in females, but this data is probably due to the naming reasons, as in males dermatophyte infections are more likely to be diagnosed as Tinea barbae. It typically presents as circular erythemosquamous plaque with central clearing and border elevation. Atypical clinical presentation presents as multiple or irregular erythematous patches without annular shaping. Due to anatomic features of face, less typical clinical presentation is more frequent. Therefore, it is commonly misdiagnosed as cutaneous lupus erythematosus (CLE), polymorphous light eruption, eczema, rosacea, granuloma anulare. Thus, it is clear that T. faciei presents a significant diagnostic challenge. The data from the literature implicate that Tinea faciei is the most commonly misdiagnosed entity among all cutaneous fungal infections.

**Materials & Methods:**

We present a 40-years-old woman with a four month history of erythematous well-demarcated plaque with crusts and slight scaling on the right chin, as well as one small plaque covered by crust nearby the right eye. She reports the phenomenon of photoaggravation. The working diagnosis was set up as cutaneous lupus erythematosus with secondary impetiginization. Skin biopsy was performed, and the histopathological finding stated: hyperkeratosis with parakeratosis, spongiosis and slight collection of neutrophils in stratum corneum, papillary dermal edema. However, hyphae were not observed on H&E-stained sections.** On the basis of clinical and pathohistological correlation the new working up diagnosis was set up- Tinea faciei. The patient was sent for collection of skin scrapings and consequent direct microscopic examination. The examination result was positive for dermatophytes. The patient has been administered 4-week course of griseofulvin, 500mg daily divided in two doses. The skin changes completely cleared by the completion of antifungal therapy. We performed follow-up checks three months and one year after commencing therapy. At the follow-up checks there was no evidence of skin changes reappearance, evolution of new skin changes or occurrence of any skin illness until the last follow-up one year later.

**Conclusion:**

In the literature, many reports revealed T. faciei mimicking many skin diseases. Furthermore, there is also one announcing the overlapping of CLE and Tinea faciei. Thus, at the last follow-up our patient presented serology tests for cutaneous lupus and all of the results were within the constraints of normal values. It is important to note that about 30% of culture results prepared for mycological investigation may be negative. Moreover, histopathological findings for tinea are very variable, especially when the infection has turned into chronic course. Therefore, it is clear to understand that T. faciei is a great mimicker and imitator of the other facial dermoses, having also in mind that it usually has atypical clinical presentation. Anamnestic data, such as worsening of skin changes due to sun exposure could mislead to wrong diagnosis.
A prospective, observational study to assess the changes in nerve function impairment (NFI) and disability status in leprosy patients on anti-leprosy treatment

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Introduction & Objectives:

Although leprosy is regarded to be a skin disease, there is a major component of neurological involvement to this infection. In this study, clinical, electrophysiological studies and ultrasonography were used to assess changes in nerve function impairment (NFI) and disability status in leprosy patients longitudinally with an assessment of quality of life (QOL).

Materials & Methods:

This was a prospective, observational study where cutaneous and neurological examination was done every three monthly for a period of one year. Sensory and motor nerve conduction study (NCS) tests and high resolution ultrasonography (HRUS) with color doppler were performed at baseline and at the release from treatment (RFT). All peripheral nerves in the upper and lower extremities were assessed for conduction velocities, amplitudes, latencies and cross-sectional area (CSA) of nerve, length of nerve thickening, endoneural flow signals (ENFS), and distortion in fascicular symmetry. QOL assessment pre and post treatment was also done.

Results:

Out of 63 patients, 43 (68.2%) had sensory complaints at time of presentation, most common being loss of sensation, 47 (74.6%). Twenty (31.7%) had no disability, 19 (30.1%) had grade 1 disability while grade 2 disability was seen in 24 (38.1%) cases. Ulnar and radial nerves improved to the greatest extent (p<0.001). While the proportionate change revealed improvement in 34 (53.9%), there was complete improvement in 16 (25.4%), no change in 11 (17.4%), the change in count of impairments between baseline and RFT was 1.76 (± 1.36). The number of count of impairments on HRUS-CD decreased consistently, significant for bilateral ulnar (p=0.009 right ulnar, 0.012 left ulnar) and right radial nerves (p=0.025). The association between NCS-SSR abnormalities and clinico-demographics of study participants showed significant results for MB patients with OR 9.12 (95% CI, 1.22-67.93), those in reaction with OR 3.56 (95% CI, 0.62-20.36) and over age of 40 years with OR 1.93 (95% CI, 0.28-13.41). These also came out as statistically significant for association with abnormal HRUS-CD. At RFT, both WHO-QOL BREF and SALSA scoring indicated improvement in QOL (p=0.005 and p=0.01).

Conclusion:

Our study demonstrated the superiority of using such a multi-modality model in arresting progression of NFI at the earliest, warranting a lesser impact on the QOL. Our study was a 12-month prospective study with a sample size of 63 patients; however, to fully understand the predictors of changes (improvement or worsening) in NFI, studies combining different investigative modalities with clinical evaluation as the core are needed. Long-term studies on large cohorts are needed to supplement the findings of our study in an attempt to associate the impact of NFI and disability status on the QOL of these patients.
Abstract N°: 3300

Mpox infection and comorbidities – an atypical manifestation

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Introduction & Objectives:

Mpox as a disease of public health importance has been noticed to have diverse presentations and severity. Title: Mpox infection and comorbidities – an atypical manifestation especially in the setting of immunosuppressive states like diabetes mellitus. The world has been plagued with several outbreaks of the disease and knowledge of this disease is still advancing especially in special situations like associated co-morbidities and immunosuppression. With the evolving nosology of this disease especially in form of atypical presentations; it becomes pertinent to report unconventional forms of presentations of the Mpox disease to aid understanding of its clinical manifestations and diagnosis.

Materials & Methods:

Case description:

A middle aged female trader presented at the Dermatology clinic with a history of umblicated vesicles and papular lesions restricted to intertriginous areas of the body. She is a known diabetic with poor glycaemic control and has been managed for recurrent flexural candidiasis; with a recent episode occurring about two weeks prior to onset of the umblicated vesicles and papules which was yet to resolve. There was associated severe malaise, fever, sore throat and lymphadenopathy. She did not have any history of recent travels, contact with animals or anyone with similar lesions.

A diagnosis of Mpox infection with background flexural candidiasis in a known diabetic with poor glycaemic control was made based on viral PCR result and histology.

Results:

Patient was counseled on the diagnosis and managed in collaboration with the endocrinology team; and she recovered fully after about 3 weeks while placed on bed rest, liberal fluids, wound care, antibiotics and tight glucose control.

Conclusion:

There is still paucity of knowledge on the influence of immunosuppression and comorbidities in MPox disease; and how these may impact on the clinical presentation of the disease. It is therefore relevant that these atypical manifestations be reported in order to improve awareness and aid diagnostic acumen for detecting and monitoring the disease.

Key words: Mpox, atypical manifestations, co-morbidities.
Abstract N°: 3340

Mucocutaneous Herpes Simplex Virus infections: a 6-year retrospective study from a large tertiary teaching hospital

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Introduction & Objectives:

Herpes simplex virus (HSV) infections are lifelong and widespread among humans. The diagnosis is made predominantly on clinical grounds. However, its laboratory confirmation is increasingly encouraged, due to prognostic and therapeutic implications. Polymerase chain reaction (PCR) is a high sensitivity and specificity diagnostic test. In our hospital, PCR for HSV detection has been available since 2017. The aim of this study was to characterize the clinical spectrum of laboratory-confirmed mucocutaneous HSV infections in the largest tertiary hospital in Portugal.

Materials & Methods:

A retrospective observational study of PCR confirmed mucocutaneous HSV infections was performed in our tertiary teaching hospital, from 2017 to 2022. The patients’ demographic characteristics and comorbidities, alongside the clinical and laboratory aspects of HSV infections were investigated. This study was authorized by the Health Ethics Committee (n. 335/22).

Results:

In this period, 947 PCR herpesvirus tests in mucocutaneous swabs were performed, 448 (47.3%) of which were positive. Of these, 266 identified HSV (and the remaining Varicella-Zoster Virus). Regarding the HSV infections, 50.4% of tests were performed on the Emergency Department. The majority of patients were female (56.0%) and the mean age was 46.3±22.6 years. There were 164 (61.7%) cases of genital herpes, 64 (24.1%) of orolabial herpes, 14 (5.3%) of eczema herpeticum, 5 (1.9%) of herpetic gingivostomatitis, and 19 (7.1%) of other HSV infections. Of these patients, 46.2% were considered primary infections, and 53.8% recurrences. Comorbidities were present in 75.6% of patients: mostly immune-mediated diseases, solid organ and hematologic malignancies, and pregnancy. Overall, HSV-1 and 2 were identified on 49.6% and 50.4% of patients, respectively. All cases of orolabial herpes were caused by HSV-1, except for 1 patient (HSV-2). Considering genital herpes, most cases were associated with HSV-2 (77.4%), most patients were female (60.4%), 72% were heterosexual and 12.8% were men who have sex with men. Other sexually transmitted infections were present in 22% of these patients, specifically HIV (9.8%), and syphilis (6.7%).

Conclusion:

In our study, herpetic infections were common and with a variable clinical spectrum. As previously reported in the literature, HSV-1 was the main cause of orolabial herpes and HSV-2 of genital herpes. However, HSV-1 genital infection is becoming increasingly common. A significant proportion of patients were immunocompromised, demonstrating the risk for herpesvirus infection and reactivation in this setting. Our hospital is one of the largest tertiary centers in Europe, which provided us with a substantial sample that demonstrates the importance of HSV infection laboratory confirmation, as the recognition of the specific pathogen may determine optimal management and define prognosis.
Dermatophytosis in Disguise: An Unusual Erythrodermic Manifestation in an Elderly Patient

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Introduction & Objectives:

Various conditions are commonly attributed as the cause of erythroderma, including psoriasis, eczema, and malignancy in the elderly. On the other hand, fungal infection is a known but rare etiology of erythroderma. Herein, we report a case of erythroderma due to extensive dermatophytosis.

Materials & Methods:

We investigated the cause of erythroderma in an elderly patient using laboratory, microbiologic, and histologic examinations.

Results:

A woman in her sixties was referred to our outpatient clinic with an 18-month history of generalized, scaly, erythematous rash, which had worsened in the past three months. The patient’s history included a 3-month history of unintentional weight loss and previous treatment with oral methylprednisolone and an unknown concoction cream for the rash. History of atopy, other previously diagnosed dermatoses, and new medication before rash onset were denied. She had no pets, no history of gardening, and no history of similar complaints in her family. On physical examination, universal erythematous patches and plaques were observed, with areas of unaffected skin and polycyclic borders on both legs. Finger and toe nails showed onychodystrophy, onycholysis, subungual hyperkeratosis, and yellow-black discoloration. Lymph nodes were not enlarged; however, bilateral non-pitting leg edema was noted. Blood work showed leukocytosis, elevated lactate dehydrogenase, and hypokalemia. Albumin level and lymphocyte morphology on peripheral blood smear were normal, with negative anti-HIV serology. Skin scrapings mounted in 20% potassium hydroxide (KOH) from the periphery of crural and pedal lesions showed long, branching, and septate hyphal filaments, but were negative from other body parts. Fungal culture from skin scrapings was sterile. Hematoxylin and eosin-stained biopsy specimens from the upper arm and abdomen were non-specific. Nonetheless, periodic acid-Schiff (PAS) stain highlighted the presence of septate hyphae in the stratum corneum. Direct nail scraping preparation with 30% KOH showed blastospores and pseudohyphae; consequently, fungal culture yielded fluconazole-resistant Candida parapsilosis. The patient was diagnosed with erythroderma due to tinea incognito and Candida onychomycosis, and was treated with itraconazole 200 mg once daily for two weeks and 2% ketoconazole scalp solution as an adjuvant. Significant improvement of symptoms and negative KOH examination were achieved, although the concomitant onychomycosis warranted longer antifungal therapy.

Conclusion:

The cause of erythroderma was ascertained based on clinical findings, supporting examinations, and excellent response to treatment. Dermatophytosis is an uncommon but increasingly reported culprit of erythroderma, and should particularly be considered in older individuals with a history of corticosteroid use. Fungal histological staining proved diagnostic in this case with otherwise unspecific pathological findings, partially negative direct examination, and sterile skin culture.
Emergence of anthropophilic dermatophytes in kerion celsi? Data from a tertiary hospital

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Introduction & Objectives:

Kerion celsi is an inflammatory type of tinea mostly seen on the scalp. Traditionally associated with zoophilic dermatophytes, kerions are reported to have a high rate of false-negative mycological samples. Despite the need for a better clinical and laboratory characterization, studies regarding the analysis of kerion celsi are limited in the literature. The aim of this study was to analyze the epidemiological, clinical and mycological characteristics of patients with kerion celsi.

Materials & Methods:

We conducted a retrospective observational study based on the analysis of clinical and laboratorial records of patients diagnosed with kerion celsi in a tertiary hospital over a 12-year period (2010-2022).

Results:

A total of 42 cases of kerion celsi were recorded, 92.86% (n=39) on the scalp. The mean age at diagnosis was 11.57 years, with only 4 cases being reported in adults. Black patients accounted for 50% (n=21) of the patients. Immunosuppression was identified in only 2 patients and contact with animals was established in 19.05% (n=8) of cases. The development of scarring alopecia was identified in 3 patients (7.14%). Direct examination was positive in only 26.19% (n=11) and development in culture was recorded in 54.76% (n=23) of the samples. The most frequently isolated agent was *Trichophyton mentagrophytes var granulare* (n=7, 16.67%), followed by *Trichophyton tonsurans* (n=5, 11.90%) and *Trichophyton soudanense* (n=5, 11.90%). However, the group of anthropophilic dermatophytes was the most frequently identified (65.22%, n=15).

Conclusion:

The high percentage of negative cultures in our sample is concordant with the literature and may be explained by the exuberant underlying inflammatory response. Though, unlike previously described, anthropophilic dermatophytes comprise the majority of cases. This may be explained by the high rate of false-negative cultures in kerion celsi with an intense inflammatory response, commonly associated with zoophilic agents. Moreover, the emergence of anthropophilic dermatophytes in urban areas, according to recent case reports, may also be a contributing factor.
Abstract N°: 3557

Dr

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Introduction & Objectives:

Recurrent and Disseminated Pityriasis versicolor (RDPV) is a common clinical entity, characterized by its recurrent and disfiguring nature in immunocompetent patients. Features of RDPV include disseminated pityriasis versicolor (PV), with involvement of more than three non-contiguous areas, with lesions of more than 10 cm in at least one of its extensions; two or more episodes of PV in one year and a positive direct mycological examination for Malassezia spp. Studies demonstrated host genetic variations in the immune response, especially the role of IL-17 in antifungal immunity. IL17A is the prototypical member of the IL17 family, having the strongest impact on health and disease.

The objective of this study is to detect whether IL-17A and F gene polymorphism is found in cases of RDPV.

Materials & Methods:

This observational case-control study included 100 cases of RDPV and 100 age and sex matched controls, in which serum samples were taken for single nucleotide polymorphism. Active RDPV patients documented 2 or more episodes per year, showed both a positive Wood’s light and direct mycological examination for Malassezia species after obtaining the samples by skin scrapings and using KOH direct microscopy, presented with lesions that involved two or more contiguous anatomical areas. From each participant, 3 ml venous blood was withdrawn under complete aseptic conditions and put in EDTA tube for DNA extraction of IL-17A & F genes. Detection of single nucleotide polymorphism (SNP) occurred using real time PCR (polymerase chain reaction) with specific primers and probe.

Results:

IL-17A (rs2275913) and F (rs763780) were linked with a significantly increased incidence of developing RDPV.

The homozygous mutant gene (rs2275913) AA of IL-17A was found in 55 (55%) patients, the heterozygous mutant gene GA was found in 38 (38%) patients and only 6 (6%) patients had the wild (normal) gene GG.

The homozygous mutant gene AA of IL-17A polymorphism was associated with a 19.708-fold (P< 0.001) increase in susceptibility to RDPV infection in the patient group. Similarly, the heterozygous mutant gene GA of IL-17A polymorphism was associated with a 7.360-fold (P< 0.001) increase in susceptibility to RDPV infection in the patient group.

The homozygous mutant gene (rs2275913) CC of IL-17F was found in 3 (3%) patients, the heterozygous mutant gene TC was found in 81 (81%) patients and 16 (16%) patients had the wild (normal) gene TT.

The homozygous mutant gene CC of IL-17F polymorphism was not associated with an increase in susceptibility to RDPV infection in the patient group. On the contrary, the heterozygous mutant gene (rs2275913) TC of IL-17F polymorphism was associated with a 9-fold (P< 0.001) increase in susceptibility to RDPV infection in the patient group.
Conclusion:

IL-17A and F gene polymorphism could be implicated in an increased risk of developing RDPV.

Patients with IL17A (G/A) and to a lesser extent IL17 F (T/C) gene polymorphism showed a significantly higher incidence (11.693-fold, 9.333-fold, respectively) of developing RDPV. The genetic etiology of RDPV is further supported by the finding of a statistically significant difference between patients and controls as regards the family history, (P < 0.001).
Introduction & Objectives:
In leprosy patients, co-infections often involve pathogens prevalent in developing countries and can modify disease progression, increase the risk of leprosy reactions, or affect the efficacy of treatment. Publications on leprosy co-infections have focused on Chromoblastomycosis and Helminths. There is a growing body of evidence on these co-infections, however, there are still many knowledge gaps and a lack of consensus on the topic. A scoping review was deemed the most appropriate method to map the clinical and epidemiological characteristics of reported Chromoblastomycosis and helminthic co-infections in leprosy and identify knowledge gaps for future research.

Materials & Methods:
Following the PRISMA Extension for Scoping Reviews guidelines, the authors conducted a literature search of five databases for articles on each of the aforementioned co-infections published prior to October 2022. Two independent reviewers conducted the selection process and identified 21 papers meeting the study inclusion criteria.

Results:
We found 151 cases of co-infection with leprosy and helminths, with a median age of 43 years and male predominance (68%). Leprosy was the primary infection in 66% of cases, and 76% of individuals presented with multibacillary disease. Association with leprosy reactions was controversial, and varied from 37% to 81% across studies. We found solid evidence of an elevated presence of helminth in leprosy patients, with all included studies showing prevalences that were higher than in the general population.

Reports of chromoblastomycosis co-infection with leprosy, despite being a common disease, were rare. Our investigation was able to identify only 20 cases of co-infection over almost six decades, 80% of which came from Brazil, 89% were male, 75% farmers, with a median age of 53.5 years. Leprosy was diagnosed first in 63% of cases, with an average interval of 6 years between diagnoses. 55% of co-infected individuals had lepromatous leprosy, 91% were classified as multibacillary, and 45% experienced leprosy reactions (9% had type 1 reaction, and 36% had type 2 reaction). The most frequent clinical presentation of chromoblastomycosis was verrucous (30%) and cicatricial (30%) lesions. In 80% of cases, *F. pedrosoi* was identified as the cause of disease, 42% of cases were severe, and 25% of patients had received immunosuppressive therapy with steroids to manage leprosy reactions. Currently, the observed findings in co-infected individuals appear to be comparable to those seen in cases of isolated leprosy or chromoblastomycosis, including with regards to treatment response.

Conclusion:
Our study shows elevated rates of helminthic co-infections in leprosy, however, revealing a probable degree of under-reporting of co-infection with chromoblastomycosis. Leprosy reactions may be higher in the co-infected
patients, but larger studies with control groups are necessary to establish definitive conclusions.
Comparing the Diagnostic Accuracy of PCR-Reverse Blot Hybridization Assay and Conventional Fungus Study in Superficial Fungal Infection of the Skin: A Systematic Review

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Introduction & Objectives: Superficial fungal infections are common diseases that affect the skin, hair, and nails, and their global incidence is increasing. The PCR-reverse blot hybridization assay (PCR-REBA) has been identified as an effective diagnostic tool for detecting superficial fungal infections. However, the diagnostic accuracy of PCR-REBA has not been systematically reviewed. This study aims to investigate the diagnostic accuracy of PCR-REBA in diagnosing dermatophytosis.

Materials & Methods: We conducted a systematic literature review following the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) reporting guidelines. Five Korean databases and Ovid-MEDLINE, Embase, Cochrane Library, and CiNii were searched from inception to August 7, 2022. Two independent reviewers screened the studies based on predefined criteria and extracted data from each study.

Results: A total of 7 studies involving 1,271 subjects with proven or suspected dermatophytosis were included. Among these studies, 4 out of 7 selected KOH smear and fungal culture as the reference standard test, while the others chose RT-PCR as the reference standard test. Compared to the KOH smear and culture test, the specificity of PCR-REBA ranged from 0% to 80.2%, the sensitivity ranged from 85% to 100%, and the positive and negative predictive values ranged from 58.9% to 98.1% and 90.5% to 95.3%, respectively. In the 3 studies that selected RT-PCR as the reference standard test, the specificity ranged from 0% to 100%, the sensitivity ranged from 93.3% to 100%, and the positive and negative predictive values ranged from 91.6% to 99.6% and 81% to 89.1%, respectively.

Conclusion: PCR-REBA shows promise as an effective diagnostic tool for superficial fungal infections. However, further prospective and randomized studies are required to validate its diagnostic accuracy.
Herpes simplex virus as a trigger factor for exacerbation of psoriasis

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Introduction & Objectives: Herpes simplex virus (HSV) can be not only a nosological disease, but also a secondary infection that can affect the severity of the course of other dermatoses. Timely diagnosis and correct therapy of the progression of psoriasis helps related specialists to prevent the occurrence of such diseases. Therefore, the goal of our research is a comprehensive examination of patients with psoriasis, especially with a severe and atypical clinical course of the disease, with the aim of detecting herpes infection and improving the effectiveness of treatment of such patients.

Materials & Methods: In the period from 2018 to 2022, 14 patients with a confirmed diagnosis of psoriasis were observed in our clinical laboratory, which underwent the following examinations - general, biochemical and immunological blood tests.

Results: During the clinical and anamnestic examination of patients with psoriasis, the following results were obtained: the form of psoriasis: limited - in 5 patients, widespread - in 9 (area of damage 35–68%), stages of psoriasis: progressive - in 39.7% of people, stationary - in 60.3%; duration of the disease: from 7 months to 32 years; heredity: in 26% of people; provoking factors: stressful situations - in 29.7% of cases, alcohol abuse - in 5.9%, microbial and viral factors - in 18.4% of people, injuries - in 8.4%. 11.6% of people did not specify the cause of the disease; the course of the disease: for 76% of people, a tendency to frequent exacerbations is characteristic, and for 24%, stable remission was not observed for a long time. Changes in the immunological blood test and the detection of HSV in 76% of patients with psoriasis forced us to prescribe antiviral drugs for therapy. The duration of treatment is determined individually for each patient. In the dynamics of treatment of patients with psoriasis, certain immune indicators change: indicators of humoral immunity decrease; the number of T-helpers increases; the percentage of T-suppressor cells decreases; the number of undifferentiated O-cells increases in the blood sample; synthesis of IgM increases; blood immune complexes increase significantly.

Conclusion: The detected changes in indicators of both humoral and cellular immunity in patients with psoriasis are indirect evidence of the negative influence of provoking factors and accompanying pathology on the intensity of the immune response in their body, which in turn leads to the formation of immunodeficiency.
To evaluate and compare nail changes in leprosy and diabetic neuropathy on clinical examination, onychoscopy and nail fold capillaroscopy

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Introduction:

Leprosy and Diabetic neuropathy are associated with multiple nail changes and share similar pathogenesis including microvascular changes and neuropathy.

Nail changes are proposed be a marker of early trophic changes in them. We aim to comprehensively study nail changes using clinical, onychoscopy and nail fold capillaroscopy to detect early trophic changes which are important cause of disability and deformity in these patients.

Objectives:

To document and compare nail changes in leprosy and diabetic neuropathy on clinical examination, onychoscopy and nail fold capillaroscopy

Materials & Methods:

A prospective cross-sectional study was conducted in tertiary care hospital recruiting 60 patients, each of leprosy and diabetic neuropathy. After taking informed consent, detailed history, complete cutaneous, neurological, and peripheral arterial examination through ankle brachial index was done. All fingernails and toenails were examined for gross, onychoscopic and nail fold capillaroscopy (NFC) changes.

Results:

The prevalence of nail changes in leprosy on gross examination (57/60, 95%) and onychoscopy (58/60, 96.6%) was higher compared to diabetic neuropathy. On clinical examination increased nail curvature, onychorrhexis, nail plate thickening, apparent leukonychia, subungual hyperkeratosis, and onychogryphosis were significantly higher (P value<0.05) in leprosy. On onychoscopy, splinter haemorrhages and nail bed pallor were significantly higher (P value<0.05) in leprosy. We propose that nail bed pallor (19/60, 31.6%) can be a specific sign in leprosy. The unique finding observed in lepromatous patients was nail plate tenting and diffuse ill-defined nail bed erythema. On NFC, giant capillaries and receding capillaries were significantly higher (P value<0.05) in leprosy.

In patients with trophic changes, nail plate thickening and longitudinal ridging was significantly higher (P value<0.05) on nail examination. Additionally, on NFC capillary drop outs were (P value<0.05) significantly higher and other common NFC changes seen were avascular area (57.5%), capillary disorganization (55%), and receding capillaries (70%).

Conclusion:

Onychoscopy and nail fold capillaroscopy evaluation may detect early nail changes predictive of peripheral vascular compromise and trophic changes in leprosy.

Limitation: Small sample size and lack of correlation with standard modalities
Conflict of interest – None
Abstract N°: 3742

Deep dermatophytosis disease in a CARD9 deficient patient

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Introduction & Objectives:

Dermatophytosis disease is an invasion of the dermal and subcutis tissues with dermatophytes causing four types of clinical presentations: deeper dermal dermatophytosis, Majocchi’s granuloma, dermatophytic pseudomycetoma or a widespread infection. CARD9 deficiency is a known risk factor in the Mediterranean region. Treatment guidelines are unclear and surgical management can be proposed for recalcitrant cases. We report a historical case of a deep dermatophytic disease that didn’t respond to any of the usual therapeutics.

Case report:

A 23-year-old man of North African origin, born from a consanguineous marriage, with a history of tinea since childhood, was admitted in the dermatology department for the exploration of multiple subcutaneous abscesses.

Physical examination showed multiple subcutaneous formations in the trunk, the scalp associated with ringworm of the glabrous skin with scarring alopecia without nail involvement. Inflammatory lymph nodes were found in the cervical and axillary areas. Ultrasound confirmed the liquid nature of the formations among necrotic inflammatory nodes and parotid infiltration. Mycological analysis revealed the presence of Trichophyton rubrum in the pus. Molecular study revealed a CARD9 mutation inducing immunotolerance to fungal infections.

The patient was put on Griseofulvin at the dose of 1 gram per day with surgical drainage of the abscesses.

Discussion:

The first case of deep dermatophytosis was described in 1949. It is mostly occurring in the Mediterranean region [3]. Tichophyton Violaceum is the most common pathogen, involved in 59.4% of cases.

A CARD9 deficiency in relation with dermatophyte infection was reported in 2013 by Lanternier et al.

In fact, CARD9 mediates antifungal immunity by forming a complex with key molecules connecting innate receptors (CLRs) to adaptive immune responses. Both congenital and acquired defects weaken host defense, resulting in an immunotolance state towards dermatophytes who penetrate into the dermis causing deep dermatophytosis.

Appearing during early childhood, lesions frequently begin as recurrent scalp ringworms (51, 7%), tinea corporis (41, 4%), or onychomycosis (6, 8%). The evolution is then marked by subcutaneous extension of nodules of various sizes mimicking cutaneous tuberculosis as the illness progresses.

There are no guidelines on the management of deep dermatophytosis. In extreme cases, the infection becomes life threatening by progressing to the viscera. Alopecia is common and can lead to complete hair loss as in our patient.
Improvement of immune status in combination with antifungal agents may be the best therapy. Griseofulvin is the most commonly administered antifungal drug. More recent molecules such as terbinafine, fluconazole and itraconazole have proven their effectiveness but their costs limit their use. In our case, antifungal drugs, even the most recent ones, were not sufficient on their own to obtain a complete healing.

The use of interferon gamma and antifungal drugs remains the best therapeutic option, even though it is quite expensive. Surgical treatment can be proposed in particularly severe cases due to poor diffusion of the antifungal agents in the collected abscesses, discomfort and aesthetics.

Conclusion:

Dermatophytic disease not only affects the social life of patients because of the displaying lesions, but also the vital prognosis because of the inexorable evolution towards deep and visceral damage.
Incidence of persistent HPV infection and progression of infection to associated anogenital disease among men in a global HPV vaccine trial

Miriam Reuschenbach

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Introduction & Objectives:

International data on anogenital HPV infection incidence and progression to associated disease among men are limited.

Materials & Methods:

Data from 295 men who have sex with men (MSM) and 1576 heterosexual men (HM) aged 16-27 years in the placebo arm (unvaccinated men) of a 4-valent (4v) HPV vaccine trial (NCT00090285) were used to estimate: incidence rates of persistent anogenital HPV infections (penile/scrotum, perineal/perianal, anal) for 4vHPV (6/11/16/18) and 9-valent (9v) HPV (6/11/16/18/31/33/45/52/58) vaccine types; rates of progression of incident persistent infections to genital warts (GW), penile intraepithelial neoplasia (PeIN), and anal intraepithelial neoplasia (AIN); and HPV-type distribution in GW, PeIN, and AIN. Kaplan-Meier methods estimated cumulative incidence of persistent infections; and progression of infections to diseases (GW and PeIN in HM and MSM; anal condyloma and AIN in MSM only) based on swab specimen results, over 36 months.

Results:

Among MSM, respective incidence (per 100 person-years) of persistent infection for 4vHPV and 9vHPV types was 7.0 (95%CI=4.9-9.7) and 9.1 (6.8-11.8) at penile/scrotum, 8.2 (5.4-11.8) and 9.8 (7.1-13.1) at perineal/perianal, and 14.1 (10.8-17.9) and 16.6 (13.4-20.2) at anal sites; incidence rates among HM were 4.2 (3.6-4.9) and 6.7 (5.9-7.6) at penile/scrotum, and 2.3 (1.8-3.0) and 3.1 (2.5-3.9) at perineal/perianal sites. Cumulative incidence of progression from incident persistent infection (any 9vHPV type) was 1.1% for PeIN and 12.1% for GW among HM; and 8.0% for GW, 39.7% for anal condyloma/AIN1, and 35.0% for AIN2/3 among MSM (no incident infections progressed to PeIN among MSM). The most common HPV types in GW were HPV6 (HM=62.3%, MSM=50%) and 11 (HM=24.6%, MSM=41.7%). Among MSM, predominant HPV types in anal condyloma and AIN1 were HPV6 (60.6%/52.2%) and 11 (36.4%/17.9%); in AIN2 and AIN3 these were HPV6 (26.5%/29.6%), HPV16 (16.3%/29.6%), and HPV 11 (12.2%/18.5%). HPV types 18 and 31 were also frequently reported in AIN3 (18.5% and 25.9%, respectively).

Conclusion:

A substantial proportion of unvaccinated HM and MSM developed incident persistent anogenital infections with ≥1 9vHPV types over 36 months. A high proportion of MSM with incident persistent anogenital infection also progressed to anal disease. Progression of incident persistent infection to PeIN was low among both HM and MSM, but a larger proportion progressed to GW.
Abstract N°: 3747

**Peri-treatment use of prophylactic HPV vaccines in patients with HPV-associated disease: Review of the mechanism of action**

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**Introduction & Objectives:**

Individuals with human papilloma virus (HPV)-related disease remain at risk for subsequent HPV-related infection and disease after undergoing treatment for specific HPV-related lesions. Prophylactic HPV vaccines have shown benefits in preventing subsequent HPV-related disease when administered before or soon after treatment. However, the terminology used to describe vaccine effects in these populations is ambiguous, sometimes implying adjuvant or direct therapeutic effects, which would be considered off-label. In such cases, the terminology can become misconstrued and cause confusion about when vaccination can be effective and how it works.

**Materials & Methods:**

We reviewed the published evidence for using prophylactic HPV vaccines in patients with HPV-associated disease before, during or after treatment, in the context of potential mechanisms by which individuals with HPV-associated disease may or may not benefit from vaccination.

**Results:**

Based on the current understanding of the HPV life cycle and vaccine mechanism of action, prophylactic HPV vaccination is not expected to clear active persistent HPV infection or unresected HPV-associated dysplastic tissue remaining after surgery. However, vaccination may reasonably be expected to prevent new HPV infections caused by a different HPV type as well as re-infection with the same HPV type, whether from a new exposure to an infected partner or through autoinoculation from an adjacent productively infected site.

**Conclusion:**

Given the reviewed virus biology and vaccine mechanism of action, vaccination should be termed prophylactic HPV vaccination regardless of past or present HPV disease. Precise terminology relating to use of prophylactic vaccines in this population is critical to avoid the incorrect expectation that prophylactic vaccines have direct therapeutic potential.
Abstract N°: 3748

Long-term efficacy, immunogenicity, and safety of the quadrivalent and 9-valent HPV vaccines: an overview of clinical trial long-term follow-up studies

Miriam Reuschenbach

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Introduction & Objectives:

Given the lifetime risk of HPV infection, prophylactic HPV vaccine clinical programs must demonstrate durable protection against infection and disease. Pivotal baseline clinical trials of the quadrivalent (qHPV) and 9-valent (9vHPV) vaccines were extended to assess long-term effectiveness against infection and disease up to 14 years (y).

Materials & Methods:

Six long-term follow-up (LTFU) extension studies were designed to evaluate long-term effectiveness of the qHPV (NCT00092534, NCT00090220, NCT00090285, NCT00092547) and 9vHPV (NCT00943722, NCT02653118) vaccines in females (aged 9-45y) and males (aged 9-26y), with follow-up periods of 10-14y. Endpoint evaluation was carried out in a rigorous fashion throughout the studies. Tissue samples collected because of lesions suspicious for HPV-related disease were analyzed. Pathology panel adjudication was performed on all tissue specimens, and HPV typing was conducted to determine endpoint attribution. In some studies, participants randomized to placebo in qHPV vaccine trials who received catch-up qHPV vaccination at the end of the base study were followed during LTFU to evaluate effects of delayed vaccination at an older age.

Results:

Across all studies, the qHPV and 9vHPV vaccine demonstrated durable effectiveness; no cases of high-grade cervical, vulvar, vaginal, and anal dysplasia or condyloma related to vaccine-targeted HPV types were observed during LTFU. Vaccine effectiveness was also observed in the catch-up qHPV vaccination groups. The LTFU studies included participants vaccinated at various ages (9-45y), of both genders, of various sexual orientations (heterosexual men and men having sex with men), and various countries across five continents, which supports the generalizability of the results.

Conclusion:

Over 10-14y, qHPV and 9vHPV vaccines provided sustained protection with no breakthrough disease related to HPV vaccine types across studies in males vaccinated at ages 9-26y and females vaccinated at ages 9-45y. Catch-up vaccination was effective, suggesting that vaccination of adults not previously vaccinated may be beneficial.
Internal malignancy as a trigger for leprosy type 1 reaction

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Introduction: T1R reaction leprosy is characterized by the exacerbation of skin and/or neural lesions. It occurs more frequently in borderline forms, and it is associated with the activation of cellular immunity against M. leprae antigens. Malignant neoplasms may cause skin lesions by direct infiltration of the skin by neoplastic cells, and by triggering an inflammatory response due to cytokines produced by tumor cells. Objectives: To describe the case of a patient with leprosy and relapsing type 1 reaction (T1R) possibly associated with internal malignancy.

Materials & Methods: A retrospective analysis of medical record was performed.

Results: Woman, 42-years-old female patient with skin lesions for seven months, erythematous and infiltrated plaques with foveolar pattern well delimited edges on the upper and lower limbs, thorax, and abdomen. Left ulnar nerve was thickened. Skin Histopathology showed granulomatous infiltration (Fig. 1A and 1B), with neuritis and intact and fragmented bacilli in NERVES (2+/6+) suggested borderline tuberculoide leprosy and multidrug polychemotherapy (MDT-MB) was started to 12 months. After three months MDT begin had exacerbation cellular response (RT1) persistent for more of one year stopped MDT. The prednisone provoked low regression and when reduced the dosage was exacerbation. Coinfections were research Serologies negative: HIV, hepatitis B, and C and VDRL 1/8. Benzathine penicillin was started by suspicion of syphilis exacerbating coinfection of RT1. About one year of the end of MDT-MB, but persistent RT1 the patient went to the emergency service due to pain and increased volume on the abdomen, CT-scan showed cystic mass with 18.0x17.5x16.5 cm on the left iliac fossae. Laboratory tests showed increased CA125 (15065 U/mL, normal ≤35U/mL) and CA19.9 (182.7 U/mL, normal ≤37U/mL), and normal value of CEA (0.6 ng/mL, normal ≤5.0ng/nL). Bilateral salpingo-oophorectomy and omentectomy were performed, and histopathology showed a serous proliferative atypical tumor on the left ovary and mixed ovarian cystadenoma on the right ovary. The Skin histopathology showed granulomatous infiltration and negative bacilli. Immunohistochemistry: POSITIVE to BCG (Schwann cells with corpuscular pattern) and to Protein S-100 (shows the nerves attacked by the inflammatory response) (Fig. 2A and 2B), compatible with T1R in borderline tuberculoide leprosy. After 18 months of the surgery, no relapse of T1R was observed, with no specific treatment.

Conclusion: The reported case, the parallel course between the tumor treatment and the resolution of refractory T1R suggests the role of neoplastic cells triggering T1R. The recognition of this association highlights the importance of the search for internal malignancies as triggering factor in refractory reactions in patients with leprosy.
Abstract N°: 3871

An Observational Study of Atypical Type 2 Lepra Reactions

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Introduction & Objectives:

Leprosy reactions are acute immunological events that complicate the chronic infection caused by Mycobacterium leprae. Type 2 Lepra reaction typically presents as crops of evanescent, erythematous tender nodules and plaques which are easily diagnosed. However atypical variants of type 2 lepra reaction due to their morphological variations can pose diagnostic dilemmas and can be a cause for significant morbidity and rarely mortality. The objective of this study was to describe the morphology and clinical profile of the atypical variants of Type 2 lepra reaction.

Materials & Methods:

This was an observational descriptive study wherein all leprosy outpatients and inpatients attending the dermatology department over a duration of two years were enrolled and cases with atypical type 2 lepra reaction were studied in detail. Histopathological confirmation and acid fast bacilli positive staining helped to confirm the diagnosis in all cases.

Results:

A total of 88 leprosy patients were seen during the period of the study out of which Type 2 lepra reaction was observed in 25 patients. Among these 25 patients, eleven had classical lesions of erythema nodosum leprosum, six had features of classical as well as atypical ENL, whereas eight patients presented with atypical ENL alone. The various morphological variants of type 2 lepra reaction observed were pustular, bullous, ulcerative, necrotic, lesions resembling sweet syndrome, erythema multiforme, livedo reticularis and keloid.

Conclusion:

The present study revealed that the occurrence of atypical type 2 lepra reaction is on the rise which could be due to various factors. Having an adequate knowledge of these uncommon variants is essential in early diagnosis and prompt management to reduce the global burden of the disease.
Arcanobacterium Haemolyticum - Infection in an Immunocompetent Child

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Introduction & Objectives:

Arcanobacterium haemolyticum is a pathogen usually associated with an exudative pharyngitis in adolescents, and less commonly soft-tissue infections in patients with underlying co-morbidity. To the best of our knowledge, we describe the first Australian case of A. haemolyticum causing a soft tissue infection in an immunocompetent child.

Materials & Methods:

A seven-year-old male presented to the emergency department with a nine-day history of a bullous eruption on his feet. A clinical diagnosis of bullous tinea pedis had been made by his primary care physician and he had been commenced on topical clotrimazole, hydrocortisone and mupirocin. He was an otherwise well child with no immunocompromise. The eruption on his feet was characterised by tense bullae with purulent exudate and widespread erosions. He was commenced on topical terbinafine for his suspected bullous tinea whilst microbiology was in progress.

Bacterial culture of multiple swabs isolated A. haemolyticum and Streptococcus dysgalactiae with both pathogens demonstrating susceptibility to penicillin (Figure 1). Fungal microscopy and culture both returned as negative. The patient’s primary care physician had commenced a course of cephalexin prior to the results of the bacterial studies, which was continued due to described susceptibility in the literature. At two-week follow-up, he had near complete resolution of his cutaneous changes.

Results & Conclusion:

A. haemolyticum is a Gram-positive pleomorphic facultative anaerobic bacillus that is associated with exudative pharyngitis in adolescents and less commonly soft-tissue infections in patients with diabetes mellitus. Rarely, it has been reported as a causative agent in septicemia, osteomyelitis, cavitary pneumonia, brain abscesses and endocarditis, primarily in immunocompromised patients. To the best of our knowledge, A. haemolyticum has never been isolated as a causative agent of soft tissue infection in Australia. The bacillus was first described as a causative pathogen in acute pharyngitis and wound infections and was initially termed ‘Corynebacterium haemolyticum,’ before being recategorised within the Arcanobacterium genus. The coryneform appearance upon Gram-stain, slow growth and weak haemolytic activity on blood agar lends itself to the difficult identification of the pathogen and its potential underreporting. When isolated from soft-tissue infections, A. haemolyticum has been found as a co-pathogen alongside b-haemolytic streptococci, Staphylococcus aureus and Corynebacterium striatum, which was consistent with our isolation of S. dysgalactiae. Whilst treatment protocol for the management of A. haemolyticum soft tissue infection hasn’t been established, the isolate in this case demonstrated susceptibility to penicillin, and the patient’s symptoms resolved with cephalexin. Susceptibility to minocycline, vancomycin and b-lactam antibiotics has been demonstrated in several strains and some have demonstrated resistance to levofloxacin, clarithromycin, gentamicin, and clindamycin.
Figure 1: (a) Original horse blood agar plate with A. haemolyticum and S. dysgalactiae and (b) pure streak of A. haemolyticum on horse blood agar.
Chronic polymorphous presentation of Mycobacterium chelonae in an immunosuppressed patient.

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Introduction:

Mycobacterium chelonae is a rapidly growing, Nontuberculous mycobacterium (NTM), ubiquitous in the environment that has been found in soil, water and aquatic animals; it can cause polymorphous manifestations. The disseminated cutaneous form is relatively common in immunosuppressed patients, however making the diagnostic can be difficult because it is commonly associated with bacterial skin and soft tissue infections, especially those affecting the extremities and can be misdiagnosed as cellulitis or abscesses. We present a case report of an immunosuppressed patient with chronic and polymorphous lesions that were consistent with an infection by M. chelonae.

Case Report:

A 40-Years-Old man with a long history of autoimmune haemolytic anemia treated with high dose of prednisone and azathioprine presented to the emergency room with ulcers in his legs. He was hospitalized 3 months ago in a second-rate hospital for a skin disease in his lower extremities that started with pain, swelling and blistering that progressed to ulcers; he was treated for a soft tissue infection with antibiotics with non-response and deterioration. A skin culture was done with result of P. aeruginosa for what he received another antibiotics course without response, thus he was referred to our hospital for further evaluation. On physical examination, he presented in his lower extremities with predominance in the anterior side of the left leg and the medial side of the right thigh, 3 deep ulcers of different diameters, the largest one of 25cm. they had a dirty base with remnants of yellow-greenish fibrinous material and non-purulent exudate, edges were well defined, irregular, slightly raised and erythematous; additionally he presented macules, papules and nodules indurated to touch around the edges of the ulcers; the lesions were extremely painful on palpation. 3 biopsies were taken to be sent for histopathological study, another bacteriological culture and extended polymerase chain reaction (PCR) for atypical mycobacteria; obtaining from the latter, positive result for M. chelonae. Treatment was started with linezolid and clarithromycin with good results after months of treatment.

Conclusion and Importance:

The incidence of NTM infections, especially the rapidly growing ones, is increasing. Soft tissue infection by M. chelonae can present in various clinical forms without distinctive features, thus making the diagnosis is difficult. High clinical suspicion is required, especially in the context of trauma, surgery or cosmetic procedure. Although no history of important traumatic inoculation was found in this patient, he did report performing multiple aquatic activities in dams and lakes where the micobacteria has been found; in addition, the lack of response to multiple antibiotic regimens, the chronicity and polymorphous of the lesions led to a broader differential diagnosis.
Abstract N°: 3915

Localized genital crusted lesions in an immunocompetent patient: Think about scabies.

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Introduction & Objectives:

Crusted scabies is a severe contagious form of scabies which occurs generally when an immunosuppressed patient is infected with Sarcoptes scabiei. It is characterized by extensive, thick and hyperkeratotic lesions. However, Crusted scabies localized solely to the genitalia is exceptional. Here we present the case of an immunocompetent man with a localized crusted scabies in the genital area.

Materials & Methods:

Results:

A 25-year-old male with a medical history of schizophrenia under treatment, presented to the Dermatological Department for isolated pruritic lesions of the penis that had been evolving for 1 month with nocturnal recrudescence. Moreover, the patient denies any recent sexual intercourse. Physical examination revealed 3 grey to yellow-white crusted papules on the penis surrounded by a slight rim of erythema, no other lesions were found on the scrotum, extremities, scalp or face.

Laboratory tests showed no abnormalities with a negative venereal disease test. Skin scrapings were collected for microscopy. Microscopic preparations revealed huge numbers of Sarcoptes scabiei variety hominis, confirming the diagnosis of crusted scabies.

The patient was treated with ivermectin 12 grams in one take, with complete resolution.

Conclusion:

Crusted scabies or Norwegian scabies is a highly contagious form of scabies owing to unopposed proliferation of Sarcoptes scabiei mites in the skin causing hyperkeratotic scaling and pruritic crusted lesions. It most commonly occurs in individuals with severe immunosuppressive diseases or those who use systemic or topical immunosuppressants, which can explain the inability of the immune system to prevent an overwhelming scabies reproduction. Our patient’s presentation of thickly hyperkeratotic plaques localized to the glans penis is unusual.

The therapeutic management of crusted scabies relies on isolation, nails clipping, and laundering of clothes. Due to resistant nature of the disease, concomitant oral and topical treatment is preferred such as oral ivermectin with permethrin 5% cream/benzyl benzoate 25% emulsion. Efficacy of permethrin single application is maximum among various antiscabitic topicals available.

Symptomatic treatment includes antihistamines and emollient application. Keratolytic agents such as 5–10% salicylic acid, 40% urea or soaking in a hot water bath for thick crusts removal can be used.

We hope that our case can raise clinicians’ awareness to scabies infection in the presence of localized genital lesions even in an immunocompetent patient.
Abstract N°: 3931

De -novo Histoid leprosy – a New and emerging trend in Hansens disease

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Introduction & Objectives:

Histoid leprosy was originally described by Wade in 1963 and is regarded as a rare variant of lepromatous leprosy. The characteristic clinical lesions are firm, stretched and shiny nodules with features reminiscent of dermatofibromas or keloids in a background of apparently healthy skin. Conventionally leprosy has been divided into various spectra of presentation ranging from the tuberculoid to the lepromatous pole, as well as histoid, pure neuritic leprosy and reactional states. This however is an oversimplification as leprosy can present in unusual clinical forms that may obfuscate the diagnosis and confuse the dermatologists.

Rare variants of leprosy pose a diagnostic challenge even to astute clinicians and histoid leprosy is one such form of disease with unique clinical and histopathological features. De novo histoid leprosy is a real challenge for all dermatologists to diagnose correctly. There are very few studies in the medical literature on histoid and de-novo histoid leprosy i.e. lesions of histoid leprosy developing without evidence of lesions of other types of leprosy in the patient.

Materials & Methods:

Our objective was to detect, study and highlight unusual clinical presentations of leprosy as de novo histoid leprosy and study the demographic details, clinical features, histo-pathology, treatment, complications and course following treatment of de-novo histoid lesions, in a tertiary care urban hospital. All patients included for study underwent slit skin smear examinations.

This is a retrospective and perspective study of all leprosy patients examined in the out-patients clinic and registered with the leprosy clinic of our tertiary care referral centre from January 2018 to December 2022.

Results:

The incidence of histoid leprosy among the registered patients of our clinic was 1.8% (39 of 2150). There was a significant male preponderance with a male/female ratio of 5.2 : 1. The anatomical areas of involvement were face and ear lobes (65.5%), arms (60.5%), back (55.5%), forearms (45.5%), thighs (40.5%) and legs (25%) in descending order of frequency. De novo histoid lesions, i.e. lesions of histoid leprosy developing without evidence of lesions of other types of leprosy in the Ridley-Jopling classification or previous history of leprosy treatments, appeared in 12.5% of patients. Only one patient manifested ENL after the diagnosis of histoid leprosy. The disease responded satisfactorily to the respective World Health Organization multidrug therapy regimens in all except in one patient who relapsed with borderline lepromatous leprosy.

Conclusion:

The bacillary load is very high in these patients. They can form a potential reservoir of the infection in the community especially in the post leprosy elimination era. Contrary to the earlier belief in the dapsone era, most of our patients manifested disease without any previous history of leprosy or inadequate or incomplete anti leprosy therapy.
A correct and timely diagnosis of de novo histoid leprosy will prevent the debilitating sequelae and save the community.

**Strengths of this study** – This study shows the trend in the proportion of de novo histoid leprosy cases over a period of 5 years so that tertiary care and community services can be planned effectively.

**Limitations of this study**

The total number of cases in tertiary care hospital and leprosy centres reported in this study may increase many fold if statistics is combined with the regional and national level. **
Abstract N°: 3939

A novel immunotherapy- Intralesional MMR vaccine for recalcitrant cutaneous warts

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Introduction & Objectives:

Warts are the commonest viral infection that we encounter in dermatology OPD. Many modalities of treatment is been developed, but most of them are in vain. Immunotherapy is one of the promising modality used in the treatment of recurrent cutaneous warts. To evaluate the efficacy and safety of intralesional MMR vaccine in recurrent cutaneous warts.

Materials & Methods:

This is an interventional prospective study conducted on 75 subjects having recurrent cutaneous warts attending Dermatology OPD in a tertiary care centre in Bengaluru. 0.2- 0.5 ml of MMR vaccine was injected intralesionally into the largest wart. It was given every 2 weeks till there was complete clearance. Not more than 5 injections were given to each patient. Patients were assessed during each session for reduction in the size and number of warts and any adverse effect of MMR vaccine. Patients were followed up for 2 months after treatment to detect any recurrence.

Results:

Out of 175 patients, 144 were males and 131 females. Mean age group being 38.66±12.43 years and the mean duration of warts- 12.22±23 months. 24 had periungual warts, 20- palmar warts, 15- common warts, 10- flat warts and 6- plantar warts. 100% complete response was seen in plantar warts. 83.33% periungual patients had complete response. 61.3% (146 out of 175 patients) had complete clearance, 18.66% had partial clearance (50-99%). Flat and filiform warts showed least response. There was statistical significance of p<0.01 in the injected site response (p = 0.0023) as well as the distant site response (p=0.0168). The study showed the significant therapeutic response around 3rd, 4th and 5th follow up in both the injected as well as the distant site. Thus the number of injections to achieve the clearance ranges between 3 and 5. The most common side effect observed was pain at the injected site and none of the patients had recurrence of warts.

Conclusion:

Immunotherapy with MMR vaccine is safe, cost effective, non destructive method, has a good cure rates and excellent safety profile. This is effective equally at injected and warts at distant site, and prevent recurrence of wart with complete clearance.
**Abstract N°: 3952**

**Cutaneous leishmaniasis of the lower lip: A case report.**

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**Introduction & Objectives:**

Cutaneous leishmaniasis (CL) is an infection caused by protozoa belonging to the genus *Leishmania* (*L*). The disease is transmitted by sandflies, most frequently *Phlebotomus* (*P*) spp.

Cutaneous leishmaniasis in the Mediterranean basin is usually characterized by a single polymorphous lesion located at uncovered areas, in particular the face. But the labial affection remains uncommon.

We present a case of CL characterized by unusual localization in the lower lip.

**Materials & Methods:**

**Results:**

A 62-year-old female patient, with no past medical history, was referred to our department with erythematous lesions on the face with swelling of the lower lip present for 5 months.

Physical examination revealed a severe swelling which involved the left side of the lower lip. The surface of the swelling was slightly erythematous and irregular, with the presence of crusts and scaling. Extraoral physical examination showed similar lesions in the tip of the nose along with nodular lesion of the external cantus of the left eye. Cervical lymphadenopathy was undetected on palpation.

An incisional biopsy was performed under local anesthesia and the histopathology results showed leishmaniasis findings.

We completed the laboratorial tests with microscopic examination of Leishmania parasites in Giemsa-stained smears of the lesion sampling and in cutaneous biopsies. Also, polymerase chain reaction (PCR) detecting Leishmania DNA directly from dermal scraping was also performed for diagnosis.

All tests were positive, asserting the diagnosis of leishmaniasis.

The patient was treated with intralesional injections of N-methylglucamine antimoniate (1ml/cm²) with complete resolution in 8 weeks.

**Conclusion:**

Leishmaniasis of the lips is very uncommon and occurs mainly in young patients. It is characterized clinically by the slow and progressive enlargement of one or both lips; macrocheilia usually is the final appearance. It may undergo an ulceration which may be covered by crusts and scaling. Regional lymph nodes are never involved.

Clinical diagnosis of leishmaniasis of the lips is difficult; the most important diseases which must be taken into consideration in differential diagnosis are bacterial infections, syphilitic chancre, granulomatous cheilitis, lymphoma and squamous cell carcinoma.

Difficulty in clinical diagnosis of leishmaniasis of the lips dictates a biopsy with histopathologic examination.
Cytologic examination is sometimes helpful in those cases of CL characterized by erosions or ulcers.

Regarding the treatment, with the exception of a case of spontaneous complete remission, all studies have shown that the therapy of choice is pentavalent antimony derivatives, by either IV, IM or intralesional injections.

Clinicians should develop a higher level of suspicion regarding the disease in the presence of lesions located in the oral and nasal mucosa, with or without cutaneous involvement, in order to enable early treatment and better prognosis for the patients.
Abstract No.: 3957

**Pustular eruption on the face, what’s the diagnosis?**

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**Introduction & Objectives:**

Numerous infections arise during the course of an HIV-positive person’s evolution, most often leading to AIDS disease. They are said to be opportunistic and induced by severe immunodepression.

HIV-associated suppurative folliculitis is usually of bacterial origin. When bacterial cultures are performed, Staphylococcus aureus is the organism most often implicated.

Bacterial folliculitis is common in HIV patients, whose immunity is still apparently normal but in fact, recognizes a qualitative deficit. However, they occur in almost one out of two AIDS patients in an advanced immunodepressive situation.

**Materials & Methods:**

**Results:**

A 45-year-old divorced man who has just been released from prison, presented with a week’s history of pustular eruption on the face and a flu-like syndrome (fever, chills, and sore throat) one week prior. Clinical examination showed multiple confluent follicular and non-follicular pustules on the face, forehead, and lateral aspect of the neck on erythematous skin. Examination of the oral mucosa found pharyngitis.

HIV infection was suspected given the patient’s history and symptoms and confirmed by serology. The patient was put on macrolide and a skin biopsy was planned but the pustular lesions have disappeared.

**Conclusion:**

Always keep in mind HIV infection, in front of an acute pustular eruption in a young patient with unprotected sexual relations, as she is a great simulator and an endemic infection.
A Rare Case of abdominal Bacterial Dermohypodermitis Associated with Pregnancy

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Introduction & Objectives:

Bacterial dermohypodermitis (BDH) is a rare but serious infection during pregnancy. Indeed, DHB increases the risk of obstetric morbidity linked to severe sepsis, multi-organ failure and, on the other hand, pregnancy can promote the appearance severe necrotizing forms of BDH.

This case highlights the value of early diagnostic and therapeutic management of abdominal BDH during pregnancy.

Materials & Methods:

We report a rare case of BDH in a young patient by illustrating the clinical, para-clinical, therapeutic and evolutionary aspects of BDH during pregnancy in a young man followed in the dermatology department of the Hassan II University Hospital in Fez.

Results:

37-year-old patient, multiparous, Pregnant at 16 weeks of gestation. with no with no pathological history, had presented with painful erythematous pain in the lower abdomen evolving 4 days before admission. On admission, the clinical examination found a patient in good general condition. fever at 38, negative proteinuria on urine strips, with the obstetrical examination a patient outside of labor, without externalized bleeding, a uterus relaxed without perception of active fetal movements. clinical examination finds a painful hot erythematous plaque very infiltrated at the level of the lower part of the abdomen extends from the left iliac fossa to the hypogastric region and an inguinal intertrigo. On the biological assessment, the C-reactive protein level was high at 185mg/L, and the white blood cell count was 24,900/mm3. Fetal ultrasound showed no abnormalities. Ultrasound of the soft parts of the left thigh found significant thickening with significant edematous infiltration without a welldefined clearly individualizable collection. The patient was put on intravenous antibiotic therapy based on amoxicillin-clavulanic acid with a good clinical evolution.

Conclusion:

The particularity of our observation is in the rarity of abdominal in the abdomen in a pregnant woman. In this context, the early realization of a biological assessment and an abdominal ultrasound in search of an infectious focus is of major interest. Medical treatment should be instituted with delay with close maternal and fetal monitoring.
Acneiforms lesions reveals cutaneous paracoccidioidomycosis in a patient HIV positive and neurocriptococosis: A diagnostic challenge.

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Introduction & Objectives: The paracoccidioidomycosis is a tropical disease caused by *Paracocciodioides brasiliensis*, that has a great importance because of your high prevalence and potential to incapacity. With the HIV pandemic the chances to have the coinfection with paracoccidioidomycosis has grown. Usually the fungus affects men in rural areas that perform agricultural activities. This case-report comes to present a case of cutaneous paracoccidioidomycosis in a patient HIV positive with AIDS.

Case report: A men with 22 years old from an urban area with progressive weight loss, chronic cough, intense headache, behavior changing with aggressiveness and tonic seizure with sphincter loss presented at a prompt health care service. It has found a HIV quick test positive and refered the patient to a infectology service in a tertiary hospital. The viral load discovered was 571,000 copies/ml and the CD4 T lymphocytes of 29 cells/mm³ at the diagnosis inaddition to opportunistic diseases, neurocriptococosis and disseminated cytomegalovirus. The dermatology service was requested to an avaliation because the patient had acneiforms lesions on the trunk, it was proceeded a biopsy that revealed a presence of Paracoccidioides brasiliensis, diagnosing cutaneous paracoccidioidomycosis. The patient was treated with amphotericin B.

Discussion: The combined opportunistic diaseases reveals the complex treatment in patients HIV positive and AIDS. The paracoccidioidomycosis is a endemic mycosis of Latin America and a opportunistic disease in HIV positive patients but the acneiform manifestation like in your case-report is extremely rare, since the most common presentation is lung or oral disease. In addiction, these coinfections are complicated and challenging due to the need for multiple antifungal therapies and the potential for drug interactions.

Conclusion: This case-report stands out the need for a high clinical suspicion and biopsy of nonspecific skin lesions in patients with HIV for early diagnosis and treatment of opportunistic infections. This case reinforces the importance of early diagnosis through anatomopathological study and treatment of these AIDS-defining opportunistic infections for adequate patient treatment.
A retrospective analysis of medical risk factors for erysipelas

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Introduction & Objectives:

Erysipelas is a common soft tissue infection resulting from bacteria entering the dermis via breaches in the epidermal layer. Previous studies on risk factor identification for erysipelas have shown contradictory results, highlighting the need for further investigations into medical conditions that might facilitate this disease.

Materials & Methods:

We conducted a retrospective analysis comparing patients admitted for erysipelas treatment (cases) with those undergoing standard allergy testing (controls) at the Department of Dermatology at the Medical University of Vienna. We extracted relevant medical health record data of patients and compared medical conditions between the groups using Chi-squared and Mann Whitney U tests as applicable. Subsequently, we employed multivariable binary logistic regression to estimate the impact of individual medical conditions on the likelihood of erysipelas, adjusting for age, gender, and year of admission. We deemed a p-value of <0.05 as statistically significant.

Results:

1896 cases and 1658 controls were included in the analyses. Erysipelas patients suffered significantly more often from tinea pedis (24.9% vs. 0.4%; p<0.001), ulcers (19.4% vs. 2.4%; p<0.001), traumatic wounds (9.0% vs. 0.2%; p<0.001), venous insufficiency (11.5% vs. 2.8%; p<0.001), stasis dermatitis (6.2% vs. 0.8%; p<0.001), lymphoedema (5.9% vs. 0.6%; p<0.001), eczema (3.3% vs. 0.4%; p<0.001), peripheral artery disease (10.3% vs. 4.6%; p<0.001), chronic kidney disease (10.7% vs. 7.2%; p<0.001), hypertension (48.6% vs. 31.9%; p<0.001), diabetes mellitus (26.8% vs. 11.4%; p<0.001), and obesity (21.0% vs. 5.5%; p<0.001). There was no significant difference between the groups regarding cardiac insufficiency and immunosuppressive states such as HIV or organ transplant history. Logistic regression confirmed the role of skin barrier defects (e.g., tinea pedis: p<0.001; Odds ratio, OR 85.1), venous insufficiency (p<0.001; OR 2.6), lymphoedema (p<0.001; OR 8.2), diabetes mellitus (p<0.001; OR 1.7), and obesity (p<0.001; OR 2.7) as risk factors for erysipelas.

Conclusion:

We identified skin barrier defects, venous insufficiency, lymphoedema, diabetes mellitus, and obesity as significant risk factors for erysipelas.
Abstract N°: 4119

Staphylococcal disease of the face unusually caused by BCC

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Introduction:

Staphylococcal disease of the face is a bacterial skin infection secondary to staphylococcus aureus, which requires urgent and specialized management. The manipulation of a central furuncle of the face is often the cause. This report case describes a rare case of staphylococcal disease of the face with an unusual original site.

Observation:

A 68-years-old female, diabetes under treatment, whose admitted in dermatology department with an erythema of the face; the interrogation revealed a history of solid round lesion of the nose progressing for 05 years, with a history of handling and squeezing 05 days before this current clinical presentation. On general examination; the patient has a fever of 40°C, without any deterioration of his general condition, in particular no hemodynamic, or neurological disabilities. On skin examination: an area of purplish edematous erythema that is well demarcated, hot and painful located in the center of the face without any peripheral swelling. On the left nasal wing: there was a painless pearly nodule that measured 15 mm; with an ulcerated smooth surface; its dermoscopy revealed a focal ulceration, an arborizing blood vessels and a blue-gray ovoid nests. A biological inflammation was noticed (CRP at 275mg/L). A craniofacial scan was prescribed and came back without any abnormality in particular without thrombophlebitis of the cavernous sinus. A favorable clinical and biological evolution of 72h was marked after the probabilistic antibiotic treatment that allowed the patient to return home after 7 days. A biopsy of the nodule was programmed, it revealed a nodular and infiltrating basal cell carcinoma which was afterward excised. The diagnosis retained was a staphylococcal disease of the face

Discussion:

Staphylococcal disease of the face is an acute septicemia or the venous and lymphatic system participate constantly; from a site generally located at the center of the face (trapezium-shaped area, included between the corners of the mouth and the external angle of the eyes). Its diagnosis is clinically easy and is made in front of a dramatic situation of purplish erythema with facial edema. Indeed, a furuncle manipulated is the usual triggering event, however, any other central facial lesion can be the origin. Although fatal, its severity has been considerably reduced by the early administration of high-dose antibiotics. In its malignant form, staphylococcal disease can be complicated by thrombosis of the cavernous sinuses. In our case, although the untimely manipulation of the BCC was the initiating factor, the rapidity of the diagnosis and treatment avoided a dramatic end and a detection of a malignant lesion a posteriori.

Conclusion:

Staphylococcal disease of the face should be ruled out in front of any sudden infection of the face, as it remains a diagnostic and therapeutic emergency with a poor prognosis. In our case, the acute infectious situation was revelatory of a progressive and malignant tumor pathology such as BCC.
Chromoblastomycosis Mimicking Clinical Manifestations of Tuberculosis Verrucosa Cutis: A Rare Case

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Introduction:

Chromoblastomycosis is a disease caused by exogenous inoculation of pigmented (dematiaceous) fungi from environment. Clinical manifestation of chronic verrucous plaque that may also be found in tuberculosis verrucosa cutis. Chromoblastomycosis is most common in tropical and subtropical regions. Diagnosis of chromoblastomycosis is difficult due to the varied clinical manifestations. Additional examinations are needed to confirm the diagnosis of chromoblastomycosis. Appropriate diagnostic and therapeutic approaches are expected to provide better prognosis.

Case:

Male, 83 years old, complaints of verrucosa skin lesion on left foot since 1 year ago. Dermatological examination showed verrucous erythematous plaques, multiple, irregular border, plaque size, discrete, partially confluent, erosion, part of the surface covered with blackish brown crusts that were difficult to remove. Chest x-ray revealed pulmonary tuberculosis. Skin scrapings and dermoscopic examination showed chromoblastomycosis. Histopathological results found suppurative granulomatous chronic inflammation and muriform cell. Gene xpert results did not detect *Mycobacterium tuberculosis*. *Mycobacterium* culture of skin tissue was negative while fungal culture showed *Cladophialophora carrionii* species. Antifungal therapy is given based on clinical and supporting examinations to support the diagnosis of chromoblastomycosis.

Discussion:

A rare case of chromoblastomycosis mimicking cutaneous tuberculosis was found in elderly male. The clinical manifestation of chromoblastomycosis is verrucous erythematous plaques resembling tuberculosis verrucosa cutis features. Diagnosis of chromoblastomycosis was established by muriform cell and positive fungal culture results of *Cladophialophora carrionii*. 
Abstract N°: 4192

Local treatment of cutaneous leishmaniasis, optimised by photodynamic therapy (PTD) as an alternative to systemic treatment in an elderly patient: a case report

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¹Mohammed I/ CHU marrakesh, dermatology venerology, Morocco

Introduction & Objectives:

PDT is a physico-chemical method developed in oncology to destroy pathological tissues, based on the activation of a photosensitizing substance by radiation.

The objective of the work is to evaluate the effectiveness of local treatment of cutaneous leishmaniasis reinforced by PTD with methylene blue, as an alternative to systemic treatment in an elderly patient.

Case report:

The patient was 73 years old and had undergone cataract surgery two months ago.

She was admitted to our clinic for cutaneous leishmaniasis of the hand.

On examination: A round infiltrated plaque measuring 10*5cm, painless with peripheral elevation, and surmounted by a yellowish crust, on the dorsal surface of the left hand. associated with a papular satellite lesion. And an erythematous lesion measuring 2*3cm on the contralateral hand.

Because of lesion size, periarticular location, and the number of lesions, systemic treatment was given, but due to the age of the patient, we opted for local treatment as intra-lesional injections of meglumine antimoniate (2 injections per week for 4 weeks), optimized by a PDT session with methylene blue (one session).

The outcome was marked by desinfiltration of plaques after two injections and one session of PDT, with complete remission after 4 weeks, without side effects.

Discussion:

Cutaneous leishmaniasis is a single-cell parasitosis transmitted by sandfly bites.

It’s an endemic disease posing a major threat to public health in our country. Characterized by ulcerative lesions, sometimes very numerous, located on the exposed parts of the body.

It constitutes a major therapeutic challenge in Morocco due to intolerance, especially in the elderly population.

According to Salomon, the photosensitizing molecule (methylene blue in our case) under the effect of appropriate radiation triggers a phototoxic reaction, allowing the production of hydroxyl radicals, which creates cellular alterations leading to lysis of the treated tissue.

In our case, PTD with methylene blue allowed reinforcing the local treatment by the destruction of the injured tissues, thus improving the diffusion of the meglumine antimonate in the lesion, allowing a complete cure without side effects and without exposing the patient to risks of systemic treatment.

Methylene blue is a low-priced product and is also safe for the skin as a topic apply.
Conclusion:

PTD in combination with local treatment of cutaneous leishmaniasis seems to be an alternative to treatment in patients with contraindications, especially intolerance to systemic treatment.
Abstract N°: 4224

**Unusual Presentations of Leprosy**

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**Introduction & Objectives:** Leprosy is a chronic infectious disease caused by Mycobacterium leprae; an organism common in developing countries. It affects primarily the skin, peripheral nerves, respiratory system, and the eyes. Here we are presenting two unusual presentations of leprosy.

**Materials & Methods:**

**Case 1:** A 22-year-old male presented with single erythematous plaque over the right side of the face with clear midline demarcation for 3 days. It was associated with pain. When the patient was asked to close his eyes, he could not close his right eye completely (lagophthalmos). The patient had a similar complaint 13 days back and was treated as Erysipelas and given antibiotics and a short course of steroids.

On local examination, there was a unilateral well-defined erythematous plaque extending from the upper margin of the forehead to mid-cheek and midline to right ear with two small similar erythematous plaques around it present over the right side of the face. On palpation, the temperature was raised compared to normal skin. Touch, pain, and temperature sensations were decreased over the lesion but were intact over the upper and lower extremities. There was lagophthalmos in the right eye. The right supraorbital nerve was palpable and thickened. The right greater auricular nerve was visible and thickened.

An earlier presentation of the patient was almost similar to an allergic contact dermatitis or a case of herpes zoster in the initial phase without vesicles. Leprosy was only suspected when the lagophthalmos became visible and the patient had given a history of dwelling in an endemic state of leprosy. A punch biopsy and AFB smear were taken but reports are awaited.

**Case 2:** A 38-year-old male presented with extensive ulcers involving the upper and lower limbs. The ulcers were painful and showed rapid progression over 4 weeks associated with fever. He had a past history of epistaxis, unnoticed trauma, and swelling over his legs. On examination multiple discrete to confluent punched-out ulcers with yellowish necrotic slough and an overlying blackish adherent crust surrounded by erythematous rim along with the livedo racemose pattern in the background present on both upper as well lower limbs. Other findings noted were madarosis, infiltrated ear lobules and decreased sensation over lesions and loss of body hairs. Right side ulnar nerve was thickened on palpation without tenderness. A skin biopsy showed subepidermal split with interface dermatitis, red blood cells extravasation, and extensive intracellular edema with infiltration by lymphocytes, histiocytes and neutrophils. Diagnosis of lepromatous leprosy with Lucio phenomenon was made. Ulcers healed in about 2 weeks leaving behind curvilinear, jagged, hypochromic scars.

**Results:** The abovementioned cases are not the usual presentation of leprosy. But detailed history and careful examination lead to suspicion of leprosy and for case 2 biopsy confirmed the same and for case 1 biopsy report is awaited. Leprosy has a chronic course leading to disability and deformities but early diagnosis and prompt treatment with multibacillary multidrug therapy can prevent these consequences.

**Conclusion:** Leprosy can present a wide range of clinical features. A thorough history, high index of suspicion and clinical examination are essential for its early diagnosis and management to avoid deformities and disabilities and above all disease transmission.
Parinaud’s Syndrome: a rare ocular manifestation of Sporotrichosis

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Introduction & Objectives:

Sporotrichosis is the most common subcutaneous mycosis, considered a neglected endemic mycosis. It is a granulomatous, chronic fungal infection that occurs worldwide; It is caused by the dimorphic fungus species of the Sporothrix schenckii complex, which includes the species S. albicans, S. brasiliensis, S. globosa, S. luriei, S. mexicana, and S. schenckii sensu stricto. It has a high prevalence in Latin America, where the number of cases of zoonotic transmission by infected cats has increased significantly. All species causing human infections are sensitive to standard therapy, such as itraconazole, terbinafine and others. The aim of this case report on sporotrichosis is to contribute to an early diagnosis of an uncommon ocular manifestation and treatment.

Materials & Methods:

A 10-year-old female student, from São Paulo, with one month history of an erythematous papule that progressed to an ulcerated nodule on the frontal region of the face after coming into contact with a cat diagnosed with sporotrichosis, which was verified by culture of the cutaneous lesions of the feline. She also had cervical swollen lymph nodes and a lesion of the left eye. The patient first sought an ophthalmologist that treated her with amoxicillin/clavulanate potassium and itraconazole 300mg per day. Physical examination revealed an ulcerated nodule, 1.5 cm, painful, with granular fund on the frontal region. Also, there were three papules, with a shiny surface, mobile to palpation, involving tarsal and palpebral conjunctiva of the mucosa on the left eye and cervical lymphadenomegaly. Histopathological examination revealed a granulomatous, chronic inflammatory infiltrate, with no fungal infection observed. Fungal culture was negative. We decided to maintain treatment with itraconazole, which resulted in gradual improvement. The lymph nodes are not palpable now and the lesions are in regression.

Results:

Parinaud’s oculoglandular syndrome is characterized by the clinical presentation of unilateral granular or tarsal granulomatous conjunctivitis associated with painful ipsilateral regional lymphadenopathy. Although classically associated with Bartonella henselae infection, other etiologies have been described, such as viruses, fungi, parasites and mycobacteria, although these are less common. In our case, sporotrichosis was the pathogen associated with the lesions.

Conclusion:

Sporotrichosis occurs more frequently in workers who deal with contaminated soil. It is usually a disease with great polymorphism, with several clinical forms, making the diagnosis difficult. High clinical suspicion and a detailed history are essential for diagnosis. Brazil is an endemic area of sporotrichosis, although Parinaud’s syndrome is a rare manifestation of the cutaneous-lymphatic form. This case represents the importance of clinical examination and remembrance of mucosal involvement, specially in children.
Abstract N°: 4320

A patient with progressive bluish-red discoloration and edema of the right foot

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Introduction & Objectives:

Materials & Methods:

Results:

A 62-year-old female patient presented with an 8-month history of progressive bluish-red discoloration and edema of the right ankle and proximal dorsal part of the right foot. She experienced no pain, burning or itching sensation of the foot nor any systemic symptoms. Both legs exhibited equal warmth upon examination. Color Doppler ultrasound imaging of the lower extremity and inflammatory parameters were unremarkable. An ultrasound of the right ankle revealed lymphedema. Prior to the dermatologist examination, a rheumatologist had recommended broader immunological evaluation and a dermatology consultation for potential biopsy. Based on the clinical findings, we advised serologic testing for Borrelia burgdorferi, although the patient’s history did not indicate a known tick bite. Treatment initially consisted of topical corticosteroids.

The patient was seen for a follow-up examination after 6 weeks when serology results showed high levels of specific Borrelia IgG antibodies and negative IgM antibodies. A western blot was also performed, which yielded positive IgG and negative results for IgM. Immunological laboratory tests were unremarkable. Oral doxycycline 100 mg twice daily for 21 days was advised which resulted in significant improvement and resolution of skin changes.

Acrodermatitis chronica atrophicans (ACA) is a chronic and late-stage manifestation of Lyme borreliosis. It is characterized by a non-sharply demarcated livid discoloration and inflammation primarily affecting the distal portions of the extremities. ACA is often underdiagnosed due to various factors. Patients frequently do not recall a tick bite, further complicating diagnosis. Moreover, the inflammatory phase of ACA can resemble other conditions such as acrocyanosis, perniones, Raynaud’s disease or chronic venous insufficiency. ACA should be considered in the differential diagnosis of non-acute asymmetric red-bluish discoulouration of an extremity. Early recognition, accurate diagnosis and prompt treatment is crucial to prevent irreversible cutaneous damage and mitigate the risk of systemic complications associated with this disease.

Conclusion:
Abstract N°: 4350

**ophthalmic zoster, a pediatric case with no history of chickenpox**

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**Introduction:**

Zoster is caused by reactivation of the varicella zoster virus (VZV) which remains dormant in the dorsal sensory ganglia after chickenpox. Herpes zoster in children is rare, particularly the ophthalmic form, which can be responsible for serious ocular complications requiring adequate and early treatment.

We speak of ophthalmic zoster when the ophthalmic branch of the trigeminal nerve: V is affected.

We report a new case of a child with ophthalmic zoster.

**Case report:**

This is a 5-year-old boy, with no significant pathological history, in particular no notion of neonatal or maternal varicella during pregnancy or episode of varicella during early childhood; who consulted in the emergency room for a painful eruption taking the forehead, and the upper eyelid, evolving for 5 days.

The examination found an afebrile child with multiple vesicles grouped in a bouquet on an eryhematous background, involving the right side of the nose, the right hemi-forehead with edema of the right upper eyelid and difficulty in opening the eye. Ophthalmologic examination by slit lamp and fundus examination was unremarkable.

The diagnosis of ophthalmic shingles was retained and the child received intravenous aciclovir at 10mg/kg/8h. The evolution was marked by clinical improvement with regression of edema and pain. A minimal immune assessment was carried out, in particular a blood count, blood glucose test and HIV serology, the results were normal.

The follow-up at 1 month was marked with good evolution.

**Discussion:**

Ophthalmic shingles is a particular affection by its clinical presentation, its ocular complications and pain that remains potentially serious. It forms 10 to 30% of shingles cases. In children, it is rare and has a better prognosis.

An Indian study found, out of 195 cases of shingles, 22 ophthalmic shingles, 10% of which affected children.

The circumstances of reactivation of the virus in children are unknown. However, you should look for:

- Maternal chickenpox contracted in the second and third trimesters of pregnancy that can cause shingles in infants or young children.
- Immunodeficiency: the risk of shingles would be multiplied by 122 according to Guess and al. For patients with malignant pathologies, immunosuppression promotes the occurrence of herpes zoster, in particular for patients with acute leukemia or lymphoma undergoing treatment; the same applies to patients taking cytotoxic chemotherapy or immunosuppressive treatments, and to patients carrying the HIV virus.
The particularity of our case lies in the pediatric form, the absence of an episode of varicella preceding the current episode of herpes zoster, the absence of an episode of maternal varicella during pregnancy and the negative immunosuppression balance sheet.

**Conclusion:**

Ophthalmic shingles is a rare condition in immunocompetent children, with no prior notion of varicella, but remains more favorable in evolution than in adults.
Syphilis mimicking lymphoma in an elderly man

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Introduction & Objectives

Syphilis has been referred to as the “great simulator” mimicking a wide range of clinical presentations, making its diagnosis challenging and often leading to misdiagnosis.

We aim to raise awareness about the importance of considering syphilis in the differential diagnosis of atypical cutaneous lesions and systemic symptoms, even in presumed non-high-risk patients.

Materials & Methods

Medical history, physical examination findings, laboratory investigations, and imaging studies were evaluated. The diagnosis of syphilis was confirmed by serological tests and spirochetes visualization in the biopsy samples.

Results

73-year-old male was referred for dermatological evaluation due to a two-month episode of skin lesions, weakness, night sweating, fever, fatigue, and testicular pain. Physical examination showed generalized erythematous papules and nodules of 0.5-1cm with thickening of the right spermatic cord. Initial suspicion was a lymphoproliferative process. Skin biopsy, blood tests and positron emission tomography (PET) were performed.

Skin biopsy showed a dermis with dense, abnormal lymphoid infiltrate of B and T cells (mostly CD8+) with mild epidermotropism and mature plasma cells without light chain restriction. The findings suggested a lymphoproliferative process, possibly mycosis fungoides or systemic T-cell lymphoma with cutaneous involvement, however its neoplastic or reactive nature could not be definitively determined.

PET showed highly hypermetabolic dermocutaneous lesions, pulmonary nodules and bilateral lymphadenopathies. Bone marrow biopsy (BMB) was then recommended.

Serological results showed past B hepatitis and positivity for IgG ELISA for syphilis (RPR 1:32). A second skin biopsy was performed, showing no neoplastic elements but findings compatible with syphilis, abundant spirochetes were identifiable all across epidermis and dermis. BMB showed mild CD3+ lymphocyte infiltration of reactive characteristics and no evidence of neoplastic infiltration either.

The cerebrospinal fluid (CSF) was analysed, resulting in positive FTA and negative VDRL tests. Without proteins or cells detected.

The patient was initially treated with a weekly intramuscular dose of 2.4 million IU of benzathine penicillin for 3 weeks. Skin lesions improved but control PET showed possible residual lung and lymph node lesions after 3 doses. Due to CSF results and the uncertainty regarding the timing of infection the treatment was extended for 2 more weeks with daily intravenous penicillin, after which complete resolution was achieved.

Conclusion
We present a rare case of syphilis in a male patient that initially presented with atypical skin lesions, pulmonary involvement and systemic symptoms, misleading to an initial suspicion of lymphoma. Our goal is to emphasize the value of serological tests and collaboration between specialists in the diagnosis and management of this challenging disease.
Abstract N°: 4384

Atypical presentation of Hansen’s disease: a case report.

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Introduction & Objectives:

Materials & Methods:

Results:

Hansen’s disease or leprosy is an infectious disease caused by the acid-resistant bacterium known as Mycobacterium leprae, which is tropic for Schwann cells and can affect multiple tissues (skin, mucous membranes, connective tissue, peripheral nerves, testes, lymph nodes, etc.), except the central nervous system. Infection by this obligate intracellular bacillus recorded a total of 127,558 new cases worldwide in 2021 and its slow multiplication, along with its prolonged incubation period, generates a wide range of manifestations that depend on the evolution of the disease and the patient’s immune status.

A 30-year-old man, a builder, with no important personal history, attended the outpatient clinic for a one-year history of a lobulated nodule of progressive growth, salmon-colored, with a scaly surface, poorly defined irregular borders, 2.5 x 5 cm in size, with hematic crusts on its surface. Distal to this lesion there are confluent nodules forming a lobulated plaque with poorly defined borders and desquamation on its surface. Additionally, on examination there is loss of thermal, tactile and painful sensitivity in the area of the lesion. He associates the appearance of the lesion after trauma to the left knee.

Given the described picture, without other skin lesions, it was decided to take a skin biopsy and smear microscopy. The histopathological study showed the presence of countless alcohol-resistant bacilli, resulting in a diagnosis of lepromatous leprosy associated with ulceration.

Lepromatous leprosy usually manifests with macules, erythematous papules and poorly defined nodules of symmetrical distribution. Xerosis and madarosis may be present. Clinically, the forehead, nose and pinnae may be affected, which is described as leonine facies. Our patient exhibited an atypical presentation since the lesions were asymmetric, there was no facial involvement nor madarosis. Furthermore, there was no cutaneous progression since the onset of the lesions, but there was nerve progression.

The importance of this case lies in reporting that Hansen’s disease can be a diagnostic challenge due to the clinical variation with which it presents, and that patients may or may not exhibit the most common features of the disease. This reminds us of the relevance of complementary studies such as histopathology, which will accurately guide the diagnosis for correct treatment and achieve secondary prevention.

Conclusion:
Abstract N°: 4464

Tuberculosis verrucosa cutis on the buttocks: a diagnostic challenge.

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Introduction:

Cutaneous tuberculosis is a rare form of tuberculosis, consisting of only 1-2% of all extrapulmonary tuberculosis. Tuberculosis verrucosa cutis (TVC) is the most frequent form of cutaneous tuberculosis, although, given its low prevalence in our setting, it can pose a diagnostic challenge.

Clinical Case:

A 63-year-old Indian woman, a cook by profession, consulted for 2-year evolution warty plaques on the buttocks. The lesions were painful and oozing under pressure through fistulous orifices. Cultures for bacteria, mycobacteria, and fungi were negative from both the exudate and the biopsy. PCR for mycobacteria from the biopsy was negative. The biopsy revealed non-necrotizing granulomatous dermatitis with ulceration, mixed inflammatory infiltrate and edema in the dermis, with no microorganisms. Zielh-Neelsen and PAS stainings were negative. Laboratory tests showed some eosinophilia along with a positive Interferon-Gamma Release Assay. Nuclear magnetic resonance showed formation of multiple fistulous tracts with soft tissue edema. The colonoscopy was normal. The chest X-ray showed blunting of the right costophrenic angle, thickening of the right bronchovascular shafts and opacification of the right infraclavicular region. However, bronchoalveolar lavage was negative. Under the clinical suspicion of tuberculosis cutis verrucosa (TVC) and after ruling out active pulmonary tuberculosis, treatment was started with isoniazid 300 milligrams daily. After 6 months of treatment, the skin lesions resolved completely, leaving post-inflammatory hyperpigmentation.

Discussion:

TVC is the most common variant of cutaneous tuberculosis. It occurs after exogenous inoculation of the bacterium in patients previously infected with tuberculosis with moderate to high immunity. It is a paucibacillary clinical form, so Zielh-Neelsen stains, cultures and even PCR can be negative. Clinically, TVC is characterized by slow-growing hyperkeratotic verrucous plaques in trauma-prone skin areas. Typical locations are hands (the classic form of “prosector’s wart” in pathologists who formerly handled contaminated tissues) and feet, legs, or buttocks in patients who walk barefoot or sit on sputum-contaminated floors. Specifically, gluteal localization has been described as an occupational disease in farmers and construction workers. In the case of our patient, she worked as a cook and we were unable to clarify the route of infection. Among the differential diagnoses of gluteal CVT, it is worth highlighting verrucous carcinomas (Buschke-Löwenstein tumor), metastatic Crohn’s disease, deep mycoses or verrucous lichen planus, which were ruled out with complementary tests in our patient.
Abstract N°: 4475

Genetical assessment of chronic treatment-recalcitrant dermatophytic infection

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Introduction & Objectives: Dermatophyte infections are common worldwide, involving the skin, hair and nails. Dermatophyte infections could be eliminated by oral or topical antifungal treatment. Yet, a minority of the patients respond poorly to treatment. This is mostly a consequence of emerging pathogens causing recalcitrant dermatophytosis. However, immune susceptibility might also play a role.

The current study aimed to genetically characterize patients with chronic treatment resistant dermatophyte infection.

Materials & Methods: This prospective study included patients with chronic treatment recalcitrant dermatophyte infection. Failure to respond to adequate oral courses of both terbinafine, fluconazole and itraconazole, each prescribed for at least 3 months, served as an inclusion criterion. Patients with known acquired or inherited immunodeficiency were excluded from the study. Detailed baseline characteristics and data included age, gender, comorbidity, disease duration and extent, family history of fungal infections, as well as response to oral treatment. DNA extracted from patients’ blood samples was used for whole exome sequencing (WES).

Results: 10 patients with chronic treatment recalcitrant dermatophytosis were included (Mean age 53 [range 39-67]; 9 of 10 were males). All patients were infected with Trichophyton Rubrum identified by microbiology culture or polymerase chain reaction (PCR) test. None of the patients had a previous history of candidal infection. Dermatophytosis lasted over 8 years (25.2 years on average). Patients were healthy except for one patient with metabolic syndrome and morbid obesity and another one with hyperlipidemia. Three patients had first degree relatives with onychomycosis or tinea corporis. On clinical inspection, most commonly involved regions were thighs, groin and pubis in 8 patients. Nail involvement was reported in 8 patients. Whole exome sequencing identified 2 patients with homozygous mutation in CARD9 gene and one patient with FOXN1 heterozygous mutation. Those mutations were previously reported to cause immunodeficiency, while mainly CARD9 mutation was reported to cause dermatophyte and non-dermatophyte fungal infections, including deep dermatophytosis.

Conclusion: Some of the patients with chronic treatment recalcitrant dermatophytosis poses gentical mutations causing susceptibility for fungal infections. Genetical assessment is advised in this scenario.
penile erysipelas :about a case

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Introduction & Objectives:

Erysipelas is an acute non-necrotizing dermo-hypodermatitis of bacterial origin, essentially streptococcal, localized mainly on the lower limbs, its localization on the external genitalia is exceptional; however, it must be known by any dermatologist, because it constitutes a medical emergency justifying an emergency antibiotic treatment, we report here a case of penile erysipelas complicating excoriated lesions of scabies.

Observation

A 20 year old patient, with no notable history of sexually transmitted diseases (STDs), presented to the emergency room with a painful swelling of the penis that had been evolving for 24 hours in a context of fever. Clinical examination revealed a warm and painful erythematous edematous patch occupying the entire penis, without penile discharge, without associated adenopathies, the rest of the examination notes the presence of some excoriations at the level of the penis, with presence of lesions of scratching at the level of the lower limbs and abdomen, the interrogation finds the notion of family pruritus.

The biological work-up showed the presence of a hyperleukocytosis, the STD work-up was negative, the pelvic ultrasound showed a significant infiltration of the soft parts without collection, the diagnosis of penile erysipelas with scabies lesions as a gateway was retained, the patient was put under antibiotic therapy: Amoxicillin clavulanic acid at a dose of 50mg/kg/day as well as a treatment of the scabies. The evolution was marked by apyrexia and desinfiltration of the penis.

Conclusion:

Penoscrotal erysipelas is rare, it is more frequent in sexually active adults, but is also described in neonates and children. Along with general risk factors shared with erysipelas of the leg or face (diabetes, immunosuppression, alcoholism), local factors specific to the genital location have been described: pubic shaving, surgery, trauma congenital or acquired chronic penoscrotal lymphedema, in our patient the source of infection was excoriated scabies lesions. Clinically, erysipelas is characterized by acute inflammatory edema of the penis and/or scrotum, sometimes painful. Acute phimosis is possible in cases of significant edema affecting the prepuce of uncircumcised men. Regional signs (inguinal adenopathy) or general signs (fever) must be sought, the biological assessment reveals hyperleukocytosis with an inflammatory syndrome, the main differential diagnoses are Fournier’s gangrene, chronic lymphoedema and contact eczema. Antibiotic treatment of penoscrotal erysipelas is presumptive, and must be started before microbiological results are obtained. It is based on an active antibiotic therapy on the germs usually responsible, namely beta-hemolytic streptococci, in our patient the evolution was favorable under treatment by amoxicillin-clavulanic acid association.
Abstract N°: 4568

Chromomycosis: efficacy of terbinafine in combination with itraconazole.

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Introduction & Objectives:

Chromomycosis (CM) also known as Chromoblastomycosis is a chronic, granulomatous mycosis of the skin and subcutaneous tissue produced by the traumatic inoculation of various dematiaceous fungi of the order Chaetothyriales and family Herpotrichiellaceae, present in soil, plants, and decomposing wood, prevalent in tropical and subtropical regions of the world.

Chromoblastomycosis lesions are polymorphic and must be differentiated from those associated with many clinical conditions.

Chromoblastomycosis still is a therapeutic challenge for clinicians due to the recalcitrant nature of the disease, especially in the severe clinical forms.

We report a case of diffuse CM, in a woman from western Algeria, responding favorably to the combination of Terbinafine (Trbf) and Itraconazole (Itrz).

Materials & Methods:

37 years old female living in a rural area of western Algeria, presented with complaints of multiple papular and nodular verrucous lesions extended to the entire right thigh evolving for 27 years.

To the questioning there was no evidence of travel or stay in a tropical or subtropical area.

The diagnosis of certainty was made on histology which showed epithelioid granulomas without necrosis with foreign body type giant cell reaction of pigmented fungal organism.

The patient had received multiple courses of antibiotics and antifungals, as fluconazole, terbinafine, itraconazole in a sequential and anarchic manner not exceeding 06 months; not leading to any improvement.

we decided to start terbinafin (500mg/d) in combination with itraconazole (200mg/d) which had resulted in a good evolution with a subsidence of almost all lesions. we are currently at 16 months of treatment and we note a good tolerance to the treatment.

Results:

Chromomycosis is a cosmopolitan cutaneous and subcutaneous mycosis, but is mainly found in tropical and subtropical regions. It is transmitted by trauma to the skin, by contaminated plant thorns or splinters of wood, and can sometimes go undetected. The occurrence of chromomycosis in non-tropical regions is increasingly reported.

In Algeria a total of 9 cases of CM have been reported between 1985 and 2015.

Chromoblastomycosis lesions are clinically polymorphic leading to misdiagnosis. Flavio has described five types of lesions in chromoblastomycosis which includes nodular, tumorous, verruciform, cicatrical and plaque type of lesions.

The diagnosis is based on histological and mycological examinations.
The treatment of chromomycosis is poorly codified. The choice of treatment must take into account the location of the lesions, the extent, the agent isolated and the physiological state of the patient’s physiological condition.

**Conclusion:**

The combination of terbinafine and itraconazole proved to be very effective and well tolerated in our patient for this usually difficult to treat condition. Our observation seems to confirm this.
Abstract N°: 4655

Lipschütz ulcer: a rare cause of genital ulcer

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Introduction & Objectives:

Epstein–Barr virus (EBV) is an ubiquitous human herpesvirus, primarily transmitted through direct contact with saliva. Transmission via blood transfusion or genital contact is also possible.

EBV infection can rarely be associated with Lipschütz ulcers, a very painful manifestation, mediated by immune reactions. It represents a very rare complication of acute, primary EBV infection. Only around 40 cases have been reported.

Materials & Methods:

We report a case of a 9-month-old infant with Lipschütz ulcer.

Results:

A 9-month-old infant, with no pathologic history of interest, presented with a three-day history of vulvar ulceration associated with fever. Genital examination showed 1 cm diameter on the right labia majora with erythematous base associated with oedema and erythema of left labia majora. The ulcer had a white center and purple red edge. Biology showed elevated levels of serum C-reactive protein (15mg/l), hyperlymphocytosis (18 000/ml) associated with the presence of hyperbasophilic lymphocytes on the blood smear. The diagnosis of ulcer of the Lipschütz secondary to infectious mononucleosis was made. The patient was treated with dermocorticoids and antipyretic drugs. The ulcers healed within three weeks.

Conclusion:

This entity known as acute vulvar ulcer, Lipschütz ulcer or ulcus vulvae acutum, has a low incidence and, despite its characteristic clinical features, remains little known and therefore underdiagnosed in the pediatric population. Typically it presents as a solitary and large (>1 cm in diameter) lesion, though multiple and ‘kissing’ ulcers may also be seen, as in our case. It is diagnosed by exclusion of other diseases. Differential diagnosis includes infectious (genital herpes, syphilis, or other sexually transmitted diseases) or noninfectious diseases, such as Behcet’s disease, Crohn’s disease, bullous diseases, malignant tumors, traumatic causes, or drug eruptions. Treatment is mainly symptomatic. Systemic corticosteroids could be considered if the presence of systemic inflammation or ineffective topical treatment for severe genital ulcers.
Abstract N°: 4669

A cutaneous cryptococcosis leading to the diagnosis of a disseminated form with meningoencephalitis in a 13 year old patient: a case report

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Introduction & Objectives:

Cryptococcosis is a serious and relatively rare infection. It is mainly seen in immunocompromised individuals. The cutaneous form is even rarer. We report a case of a cutaneous cryptococcosis leading to the diagnosis of a disseminated form with meningoencephalitis in a 13 year old patient.

Materials & Methods:

Results:

A 13 year old female patient, with no previous medical history, presented with a suspected meningitis with a fever of 39.5o, headache and vomiting evolving for one week before her hospitalization in pediatric department. On clinical examination, two painless and non-pruritic skin lesions evolving for 10 days before the admission were found on the face: umbilical papules with hemorrhagic crusts. The dermoscopy revealed a central ulceration, fine whitish scales and polymorphic vascular structures made of linear vessels and telangiectasias. The biological tests were normal. Unfortunately, the patient passed away before running the study of cerebrospinal fluid and HIV serology. However, the performed skin biopsy results showing an ulcerated epidermis with a mucoid infiltrate in the dermis and spherical spores of variable size with a thick capsule creating a clear halo extending into the hypodermis, allowed us to retain the diagnosis of cryptococcosis in its cutaneous form probably associated with a disseminated form which was responsible for the meningoencephalitis.

Conclusion:

Cutaneous cryptococcosis is a rare form of cryptococcosis which represents a great clinical polymorphism. The dermoscopic features of this entity are rare in the literature as they have been reported in only one study, for that, further studies in this area would be desirable. However, it should be borne in mind that the primary cutaneous form is even rarer and should be systematically investigated for an internal focus before considering treatment options.
Abstract N°: 4690

Mycetoma in Tunisia: A 41-year retrospective study

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Mycetoma in Tunisia: A 41-year retrospective study

Introduction & Objectives:

Mycetoma is a chronic granulomatous infection that primarily affects the skin and subcutaneous tissue of the feet and lower extremities. It can be caused by either fungal (eumycetoma) or bacterial (actinomycetoma) agents. The infection typically occurs following the introduction of these causative agents through minor wounds, often caused by thorns or wood splinters. Mycetoma is predominantly found in tropical and subtropical regions, while its occurrence in Tunisia is exceptionally rare. The objective of this report is to describe the epidemioclinical features, treatment modalities, and outcomes of mycetoma patients in Tunisia.

Materials & Methods:

A retrospective study was conducted from January 1976 to December 2022, including all patients treated for mycetoma in our Dermatology department.

Results:

A total of 17 cases of mycetoma were documented during the study period, including 7 men and 10 women. The average age at diagnosis was 37.8 years, and the mean duration before the initial medical evaluation was 12 years. Diagnosis of suspected lesions relied on clinical, histologic, and biological features. Fifteen patients reported the presence of grains in the fluid discharged from fistulas, with grain colors ranging from black (6 cases), white (7 cases), to yellow (2 cases). The causative organism was identified in only 11 cases, with 4 cases of actinomycosis and 7 cases of fungal infection. Among the actinomycotic mycetoma cases, Actinomadura madurae was responsible for two cases, while Streptomyces somaliensis was identified in the remaining two cases. Among the fungal mycetoma cases, Madurella mycetomatis was found in five cases and Pseudallescheria boydii in two cases. Lesions were primarily located on the foot in 15 patients, with a reported history of trauma in four cases, and eleven patients residing in rural areas. Bone involvement was observed in 10 patients, and one patient experienced neurological and ophthalmological complications. Treatment consisted of oral antibiotics for actinomycetoma (4 cases) and oral antifungals for eumycetoma (6 cases). Surgical intervention was performed in six out of ten patients with bone involvement. The clinical outcome was favorable in nine cases, while three patients were lost to follow-up.

Conclusion:

Mycetoma remains uncommon in Tunisia, with a slight predominance in females. Clinically, the disease presents as small, firm nodules that can progressively enlarge, resulting in extensive lesions accompanied by fistulas and abscesses containing granules of the causative microorganisms. The foot is the most commonly affected site. Diagnosis of suspected lesions involves grain examination, microscopy, imaging, culture, and more recently, molecular methods such as PCR and molecular sequencing. Black grains typically indicate eumycetoma, while red grains indicate actinomycetoma. Distinguishing between eumycetoma and actinomycetoma is crucial for treatment decisions. Actinomycetomas generally respond well to antimicrobial therapy, while eumycetomas often...
require surgical intervention.
Abstract N°: 4695

Staphylococcal scalded skin syndrome in a Malagasy Woman

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Introduction & Objectives: staphylococcal scalded skin syndrome (SSSS) is an epidermolysis caused by an exfoliative toxin A and B secreted by certain strains of Staphylococcus aureus. It is most common in newborns. We report a case of SSSS in an adult due to long-term corticosteroid therapy seen in a Malagasy woman.

Materials & Methods: A 28-year-old woman was admitted to the Regional reference hospital Antsirabe for fever associated with generalized erythema. Cutaneous manifestations appeared 10 days prior to admission. She had a pathological history of atopic dermatitis treated for years by a general practitioner with corticosteroid. No recent use of antibiotics or new medication other than prednisolone was reported. Examination revealed an altered general condition, a fever (39.5°C). Cutaneous examination found generalized erythema with diffuse desquamation, a confluent pustule realizing a patch, an a painful vesiculobullos and erosion on the legs. A positive Nikolsky’s sign and an erythematous aspect of the throat were present. The rest of the examination showed a cushingoid facies. Biological investigation was marked by an inflammatory syndrome. Renal and hepatic function examination were normal. Bacteriological examination of local samples from the nasopharynx and pustules was positive for S. aureus. A colony of S. aureus Meti-S grew on blood culture. Histologically, intraepidermal cleavage without necrotic keratinocytes was found. The diagnosis of SSSS related to chronical immunosuppression due to long-term corticosteroid therapy was evoked. A parenteral antibiotic therapy was started with a rapid improvement.

Results: The diagnosis of SSSS is primarily clinical. Skin histology confirms the diagnosis by demonstrating superficial cleavage of the epidermis under the stratum corneum in the absence of epidermal cells necrosis, thus eliminating toxic epidermal necrolysis, which is common in adults. Risk factors for SSSS in adults include chronic renal failure, immunosuppression, and long-term corticosteroid therapy, as in our patient’s case.

Conclusion: Our case highlights the importance of early diagnosis of SSSS in an adult which although unusual can be life threatening.

Keywords: Staphylococcus aureus; Staphylococcal scalded skin syndrome; Madagascar
Chromomycosis in solid organ transplant recipients: case report and review of the literature

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Introduction & Objectives:

Chromomycosis is an endemic fungal infection of the skin and the subcutaneous tissue which is prevalent in humid areas of the globe like tropical and subtropical zones. Solid organ transplant (SOT) patients are at special risk of developing opportunistic infections due to the iatrogenic immunosuppression, however the prevalence of chromomycosis in these patients remains unclear. The present report shows four cases of chromomycosis in SOT patients.

Materials & Methods:

Case 1

A 41 year-old patient diagnosed with autoimmune hepatitis received an orthotopic liver transplant in 2020 by a deceased donor. One year after the transplant the patient presented a well-defined ulcerative lesion with black dots on the third left toe. Incisional biopsy of the lesion was performed and showed pseudoepitheliomatous hyperplasia of the epidermis, paraqueratosis and fibrinoleucocitary crusts. On the dermis muriform bodies were found on the sample. Culture of the biopsied skin was positive for Fonsecaea pedrosoi. The diagnosis of chromomycosis was made and the patient was treated with cryotherapy and oral itraconazole.

Case 2

A 71 year-old patient worked as a carpenter and received an allogenic kidney transplant from a deceased donor after developing chronic renal failure secondary to diabetes in 2009. The patient came to our service in 2016 with an erythematous papular lesion on his fifth right finger. An incisional biopsy of the lesion was performed with the hypothesis of squamous cell carcinoma. The biopsy surprisingly showed muriform bodies confirmed by Fontana-Masson coloration. No culture of the material was performed. The therapeutic approach chosen was an excisional surgery of the remaining scar with a 0.5cm margin.

Case 3

A 55 year-old patient had cardiomegaly due to Chagas disease and underwent a cardiac transplant in 2012. The patient presented with a papulosquamous lesion on his right shoulder that showed up 6 months before the consultation in 2013. An incisional biopsy was performed with the hypothesis of squamous cell carcinoma versus chromoblastomycosis. The biopsied skin showed epidermic paraqueratosis and perivascular lymphomononuclear infiltrate, giant multinuclear cells and muriform bodies. Excisional surgery was then performed with completely heal of the disease.

Case 4

A 62 year-old man had undergone lung transplant in 2012 due to alfa-1-antitripsin deficiency. In 2021 the patient reported a papulosquamous lesion on his left forearm. There was no complaint of trauma on the site of the lesion. A biopsy of the lesion was then performed with the hypothesis of squamous cell carcinoma. The histopathology showed a hyperplastic epidermis, granulomatous infiltrate on the dermis with muriform bodies. The diagnosis of
chromoblastomycosis was made and the patient was completely healed with an excisional biopsy of the remaining scar showing no signs of recurrence on the follow-up.

**Results:**

All patients were treated with mechanical methods showing no signs of recurrence during the follow-up.

**Conclusion:**

It is already known that SOT recipients have a higher risk of opportunistic infections, however the prevalence of infections by demaceous fungi and in particular chromomycosis is still not a consensus in the literature. New reports are needed for the better comprehension of this subject.
Abstract N°: 4723

An unusual case of crusted scabies in erythrodermic mycosis fungoides.

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Introduction:

Scabies is an infectious skin disease caused by Sarcoptes scabiei var. hominis, considered a neglected tropical disease, with worldwide prevalence and incidence of 147 and 455 million cases per year, respectively. Transmission is interpersonal and, less frequently, via fomites. The mite is an obligate parasite that lodges itself by forming tunnels in the lower layers of the stratum corneum, associated with intense itching. The crusted form of this disease is caused by the infestation of thousands of mites that occurs mainly in immunosuppressed individuals and can evolve with complications, such as secondary infection, and sepsis. We describe the uncommon case of a patient with erythrodermic Mycosis Fungoides (MF) that presented worsening erythema and scaling, in addition to the appearance of thick keratotic plaques with the diagnosis of crusted scabies.

Observation:

A 28-year-old female patient with erythrodermic mycosis fungoides stage T4N1M0B2. In November 2022, she presented worsening erythema, and scaling was observed, together with the appearance of thick keratotic plaques on the trunk, axillary regions, buttocks, and soles. She had a positive family history of scabies, and search for Sarcoptes resulted positive (figures 1 and 2).

She was treated with sulfur 5% for five days/week and ivermectin 200mcg/kg/day, weekly, both therapies for three weeks, with significant clinical improvement

Conclusion:

Crusted scabies is a severe form of scabies that occurs due to the infestation of thousands of mites. The preserved cellular immune response would be responsible for mounting a reply against the salivary antigens generated by the mite during its feeding, thus controlling the infection. Therefore, factors that lead to a reduction in the cellular immune response make the individual more susceptible to massive infestations by Sarcoptes.

In this context, patients with Sézary Syndrome and advanced forms of MF (erythrodermic) have a deficit in cellular immunity, with a predominance of the Th2 being unable to prevent the spread of the mite. Despite this reduced cellular immunity, MF and SS patients are rarely affected by crusted scabies. Clinically, keratotic plaques are observed in palms, soles, extensor, and periungual surfaces that can be generalized and fissured, with a verrucous appearance. Complications such as secondary infection of lesions and erythroderma may occur and, in the most severe cases, septicemia, with a mortality rate of up to 50%.

Treatment is performed with keratolytic agents associated with permethrin 5%. Oral ivermectin could be performed at dosage of 200mcg/kg on days 1, 2, 8, 9, and 15. Additional doses may be applied on days 22 and 29. Antihistamines and corticosteroids may be necessary to alleviate itching. Contacts should be treated simultaneously, and personal clothing, bedding, towels, and sheets should be machine washed, dry-cleaned, or sealed in a plastic bag for one week.

Thus, when caring for a patient with immunosuppression who has crusted lesions in the topographies described
above or in cases of erythroderma, it is imperative to rule out the possibility of Sarcoptes infestation. If the diagnosis is established, treatment should start promptly to avoid potential aggravation, such as secondary infections, erythroderma, and septicemia. We reported the rare case of crusted scabies in a patient with advanced-stage of cutaneous T-cell lymphoma, who rapidly improved after the start of the appropriate treatment.
Abstract N°: 4763

**Acquired Epidermodysplasia Verruciformis: Epidemiological, Clinical And Histopathological Characterization.**

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**Introduction & Objectives:** Epidermodysplasia verruciformis (EV) was described in 1922 by Lutz and Lewandowski as an autosomal recessive genodermatosis in which individuals have a high susceptibility to human papillomavirus (HPV) infection, particularly from the betapapillomavirus genus (types 5 and 8). Clinically, the disease manifests as flat and pityriasis versicolor-like skin lesions, predominantly in sun-exposed areas. Additionally, patients frequently and early on develop squamous cell carcinoma (SCC). Subsequently, an acquired form of EV was described, known as acquired EV (AEV). This one occurs in immunosuppressed patients, such as those living with HIV/AIDS and solid organ transplant recipients (SOTRs), who undergo immunosuppressive drug therapy to prevent graft rejection. Not all AEV patients develop SCC. As the number of renal transplant recipients (RTRs) increases, so does the importance of greater knowledge of AEV in the medical community. The aim of this study is to characterize AEV according to its epidemiological, clinical, and histopathological aspects.

**Materials & Methods:** A retrospective cross-sectional study was conducted, including 22 patients with diagnosis of EV. Clinical, epidemiological, and histopathological data were collected from patient records. Patients with incomplete data were not included.

**Results:** The median age among participants was 53.5 years, with a predominance of males (54.5%). The majority (59.1%) had phototypes III/IV. Regarding the underlying condition, 18 were RTRs under immunosuppression (81.8%) and 4 were people living with HIV/AIDS (18.2%). In the RTR group, the median age was 60.5 years, with an equal distribution between sex. The main cause of renal function loss was systemic arterial hypertension (44.4%). The median time since transplantation (relative to the skin lesion biopsy date) was 11 years. The distribution regarding the type of donor (living or deceased) was similar. There was a predominance of disseminated forms of lesions, and most participants did not have other types of warts. 33.3% had a personal history of skin cancer (mostly squamous cell carcinoma). In the HIV/AIDS group, the median age was 30.5 years, with a predominance of male sex (75%). The median duration of HIV was 18 years (n=3). The median age and duration of HIV indicated that patients were diagnosed at a young age, with one patient being infected through vertical transmission. Analyzing the 22 biopsies, basket weave-type hyperkeratosis was present in 63.6% and condensation of keratohyalin granules in 40.9%. The majority (59.0%) presented absent or mild acanthosis. Perinuclear halo and blue-gray cytoplasm were present in all cases, but the majority were mild or moderate (86.3% and 77.3%, respectively). Dysplasia was absent/mild/moderate in 86.4%. No difference was observed comparing RTRs and HIV/AIDS groups.

**Conclusion:** AEV lesions were more prevalent in men (higher transplantation rate in this population). The skin phototypes in both groups were similar (III and IV). In the HIV/AIDS group, clinical manifestation occurred in younger individuals. However, in both groups (RTR and HIV/AIDS), lesion development was delayed (after 10 years of immunosuppression). The pathological characteristics were discrete acanthosis with basket-weave-type hyperkeratosis, mild to moderate perinuclear halo, blue-gray cytoplasm and dysplasia.
Effect of Adjunctive Topical Liposomal Clarithromycin on Systemic Glucantime in Old World Cutaneous Leishmaniasis: A Pilot Clinical Study

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Effect of Adjunctive Topical Liposomal Clarithromycin on Systemic Glucantime in Old World Cutaneous Leishmaniasis: A Pilot Clinical Study

Introduction & Objectives:
Leishmaniasis is a disease caused by the Leishmania parasite in humans through the bite of a parasite-infected mosquito. In this study, which is a pilot randomized clinical trial, we decided to investigate the effects of liposomal clarithromycin in combination with glucantime on cutaneous leishmaniasis lesions.

Materials & Methods:
The current study is a pilot randomized double-blinded clinical trial performed in 2018 on patients with cutaneous leishmaniasis lesions in Isfahan, Iran. A total number of 60 patients were considered. Demographic data of all patients including age, sex, weight, occupation, marital status and familial histories were collected. Number, location and size of lesions were also measured using photography method. Patients were randomized into 2 groups. The first group received treatments with liposomal clarithromycin in combination with glucantime and the second group were treated by glucantime and placebo. Glucantime ampules were administered 0.2 to 2 ml based on the size of the lesion subcutaneously and inside the lesion. Patients in the first group were administered 2 ml of liposomal clarithromycin locations every night for 28 days on the lesion. All patients were followed 6 weeks, 3 months and 6 months after treatments initiation.

Results:
The present study was performed on 60 patients with leishmaniasis. We observed no significant differences between two groups regarding the recovery time (p=0.18). We also showed that the lesion size was significantly reduced in the clarithromycin group (P=0.006) and was significantly lower than glucantime group (P=0.02). Also, patients in both groups did not report itching, dryness, swelling, redness and burning after treatments

Conclusion:
We showed that administration of liposomal clarithromycin along with systemic glucantime had significant beneficial effect on lesion size in leishmaniasis. These results were in line with the previous studies but we also suggest that more studies on larger populations should be performed.
Leprosy: a disease still neglected in developing country

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Introduction & Objectives: According the World Health Organization (WHO), 19,195 of the 127,396 new cases of leprosy were reported in the Americas region and 17,979 in Brazil. In other words, 93.6% of new leprosy cases in the Americas were reported in Brazil.

Results: A 44-year-old female patient, rural worker, who, as we were informed, had been undergoing a 2-year treatment due to an allergic reaction. At dermatological examinations, the patient showed leonine facies, which is infiltrated plaques in the region of the eyebrow, similar to madarosis, infiltrative lesions and collapse in the nose, infiltrative lesions in malar region, deformed ears due to its infiltration. Besides the facial lesions, there were infiltrated plaques disseminated all along on the patient’s body, and burn scars on both hands due to hypoesthesia. At the esthesiometer examination, the described lesions were anesthetic, as were the hands and feet. The baciloscopia exam indicated a baciloscopia index IB = 6. Therefore, a leprosy polychemotherapy was instituted with Rifampicin, clofazimine and dapsone, in 12 assisted doses.

Conclusion: In 2005, the World Health Organization (WHO) reported that leprosy was eliminated as a world public health problem. However, new cases are still seen nowadays. Globally, an average of 250,000 new patients are reported annually. Developing countries bear the biggest struggle on new cases and on patients on treatment. It is concerning that little attention is paid to leprosy in the medical curriculum. As a result of the inadequate medical training, clinical suspicion and delayed diagnosis of leprosy, resulting in permanent and debilitating complications. Lack of awareness is one of the main reasons for missing the diagnosis.
Abstract N°: 4803

Exuberant paracoccidioidomycosis in immunocompetent

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Introduction & Objectives: Paracoccidioidomycosis consists of an endemic infection in Latin America and is caused by the thermally dimorphic fungi Paracoccidioides sp. that can be found in soil of humid areas and induces a granulomatous inflammatory reaction. It mostly affects males since the oestrogens play an important role in inhibiting its pathogenic form and the competence of the host’s immune system determines if it will progress into a self-limited condition or assume a severe estate with systemic dissemination.

Results: A 48-year-old male patient, building constructor, sought the dermatology outpatient clinic complaining of the presence of a wart that had grown on his nose, with approximately 60 days of evolution. The dermatological examination revealed the presence of a verrucous lesion with a granulomatous base and a moriform aspect, affecting the entire nasal dorsum. General tests were performed such as blood count, blood glucose, liver enzymes, renal function, serology for Leishmaniasis, paracoccidioidomycosis and HIV. All serology tests were negative and exams within the normal range. A 4 mm punch biopsy with 4 different points revealed the presence of granulomatous infiltration as well as epithelioid cells and multinuclear giant cells accompanied by lymphocytes and plasmocytes, confirming the diagnosis of PB Mycosis. Therapy with itraconazole 200mg/day was instituted, with an excellent response after 60 days, that should be extended for 24 months.

Conclusion: Exuberant paracoccidioidomycosis with extensive and rapid progression is expected to happen in immunocompromised individuals since immunocompetent ones are capable of modulating its immune responses against fungi dissemination.
Abstract N°: 4813

Single monkeypox lesion in an immunocompetent young man

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Introduction & Objectives: Monkeypox is a zoonotic disease caused by monkeypox virus, of Orthopoxvirus genus. It can be transmitted to humans through direct contact with blood, body fluids, cutaneous or mucosal lesions of infected animals. The clinical presentation is described by fever, lymphadenopathy, centrifugal skin rashes, that develops into papules, vesicles and pustules, however epidemiological data remain controversial.

Results: A 24-year-old male patient complained of sore throat and an “acne excoriated” lesion on the chin for 10 days, but denied fever. He was diagnosed with tonsillitis and treated with amoxicillin with clavulanate, without improvement. On clinical examination, the uvula was hyperemic, submandibular and submental lymphadenopathy, non-painful on palpation, and a crusted plaque-like lesion measuring approximately 1.5 cm in diameter on the chin, with associated secondary infection. Due to current epidemiology, Monkeypox was suspected, despite a single lesion, PCR of the scraping and other serologies were requested. The patient remained in isolation until the result and was treated with 2 g/day cephalexin plus local mupirocin due to secondary infection. The result was positive for monkeypox. Other serologies (HIV, syphilis, hepatitis B and hepatitis C) were negative. The lesion evolved with resolution of the secondary infection and formation of a central ulceration with well-defined and elevated edges. The oral antibiotic was suspended after 10 days and the topic was changed to collagenase with chloramphenicol, which was used for another 10 days. Healing of the lesion occurred by second intention and the patient was in isolation for a little over 30 days (until complete healing of the lesion). The last wound treatment was being done with silver sulfadiazine and cerium nitrate.

Conclusion: A clinical presentation of Monkeypox in an immunocompetent young man. Important to highlight this clinical record and assist in clinical and epidemiological diagnosis.
Lip Actinomycosis: Case report of a Rare Presentation

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Introduction & Objectives:
Actinomycosis is a subacute or chronic infection caused by Actinomyces species. It is a relatively rare condition, being cervicofacial actinomycosis the most common manifestation. While facial actinomycosis commonly affects the parotids and mandible, only seven cases of actinomycosis involving the lip have been found in a search on the PubMed database. The objective of this poster is to describe a case of lip actinomycosis infection diagnosed in our Dermatology department.

Materials & Methods:
We evaluated a 79-year-old male patient who presented with an approximately 1.5cm nodular lesion on the left upper lip, one-month-old. A punch biopsy was performed, and histopathological examination demonstrated acute and chronic sialoadenitis with PAS-positive fusiform structures, leading to a diagnosis of sialoadenitis in relation to Actinomycosis infection.

Results:
The remaining lesion was surgically removed. Due to the patient’s allergy to beta-lactam antibiotics (previously experienced anaphylactic shock with Amoxicilin), a six-month course of Doxycycline 100mg every 12 hours was initiated. Systemic analysis, HIV screening and a thoracic radiograph were performed.

Surgical samples were sent for microbiological and histopathological analysis, confirming the diagnosis of chronic sialoadenitis. Microbiological cultures were negative, while histopathological examination revealed a chronic inflammatory infiltrate, scar tissue surrounded by necrotic material, and iron-loaded macrophages.

Conclusion:
Facial actinomycosis is an infrequent disease that predominantly involves the parotids and mandible, with lip involvement being less common. It is important to consider actinomycosis as a differential diagnosis for cervicofacial lesions, given its ability to mimic other conditions such as malignancy and granulomatous disease. Histological examination might be the most useful diagnostic test, as culture tests may be negative in approximately 50% of actinomycosis cases. Treatment for cervicofacial actinomycosis typically involves surgical excision combined with non-standardized antibiotic therapy, with a high-dose penicillin regimen of variable duration being the preferred choice.
analysis mrna platelet derived growth factor bb as a potential marker in erythema nodosum leprosum

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Introduction & Objectives: Leprosy is a chronic infectious disease caused by Mycobacterium leprae and is endemic to several tropical countries including Indonesia, India, and Brazil. The main problem in management of leprosy is the progress to leprosy reaction, which can occur any time during the course of disease. The leprosy reaction can be a reversal reaction or Erythema Nodosum Leprosum (ENL) reaction. Leprosy reaction is an immunologically mediated episodes of acute inflammation that can cause irreversible nerve damage, deformity and eventually lead to social stigma. Identification of laboratory markers of leprosy reactions has been a priority in research and various cytokine biomarkers have been examined. However, only few studies have reported on angiogenesis in leprosy. PDGF-BB and VEGF known to be the stimulator in angiogenesis and have been reported to be increased in ENL reaction. PDGF is a growth factor that has a pro-angiogenic effect. This research aims to determine the expression of mRNA PDGF-BB in ENL patients which play role on angiogenesis in ENL pathogenesis and might be considered for angiogenesis inhibitor therapy in leprosy reactions.

Materials & Methods: This research was a cross-sectional analysis study. The samples were collected in the dermatovenereology center in Makassar and General Hospital of Haulussy Ambon. The mRNA expression was evaluated in Laboratory of molecular biology and immunology, Hasanuddin University. Totals of 30 multibacillary leprosy patients consisting of 15 non-reactions and 15 with ENL reactions. Patients were diagnosed based on WHO guidelines for leprosy, ENL reaction diagnosed by the finding of a sudden eruption of tender nodules, plaque, or ulceration. The peripheral blood mononuclear cells (PBMC) were conducted and isolated. The DNA was extracted and quantitative real-time PCR for PDGF-BB expression were performed using an RT PCR Gene human PDGF-BB specific primer. Descriptive statistics for all variables are shown as median for non-parametric data and mean (± standard deviation) for parametric data. Mann whitney test was done to analyze the difference in mRNA PDGF-BB expression between non-ENL reaction and ENL reaction samples.

Results: The results showed differences in mRNA PDGF-BB expression between non-reaction and ENL reactions patients with median values of 6.82 and 9.15, and mean ± SD value of 6.83 ± 0.84 and 9.13 ± 0.95 where patients with ENL reactions showed higher expression. Based on the Mann-Whitney test, the p value was <0.001 which means there was a significant difference of mRNA PDGF-BB expression between non-reaction and ENL reactions patients.

Conclusion: The vascular status of the skin is considered as the vital pathogen factor in leprosy. The study of dermal vascular changes in leprosy has made it more interesting. The correlation between angiogenesis and bacterial index in skin lesions of lepromatous patients has been reported. In this study, the significant differences of mRNA PDGF-BB expression between non-reaction and ENL reactions patients prove the role of angiogenesis in pathogenesis of leprosy reactions. Further research on angiogenesis in leprosy and leprosy reactions is need to be conducted to have better understanding pathogenesis and to identify new therapeutic targets in leprosy. Inhibitor angiogenesis drugs are considered in therapy of leprosy, leprosy reaction and to prevent progression of leprosy reactions progress and it’s severity.
Abstract N°: 4950

Diagnostics of dermatophyte infections: comparison of two molecular assays

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Laboratory diagnostics of dermatophyte infections: comparison of two molecular assays

Introduction & Objectives: Microbiological diagnostics of dermatophyte infections has traditionally relied on direct microscopy and fungal culture. Since dermatophytes are slow-growing organisms, the diagnostic delay associated with these methods is often several weeks. New PCR-based assays could significantly reduce the diagnostic delay and detect a pathogen even when no viable organism is present in the sample.

Materials & Methods: We compared two commercial multiplex PCR assays for dermatophyte diagnostics: EUROArray Dermatomycosis, which detects universally 50 dermatophytes and identifies 23 dermatophyte, 3 mold, and 3 yeast species, and Pathonostics Dermagenius 2.0 Complete Multiplex Kit, which detects and identifies 11 dermatophyte and 1 yeast species.

We analyzed 103 samples: 82 patient samples, and 21 dermatophyte isolates, of which 10 were preserved patient isolates with a rare or undetermined species, and 11 were laboratory quality control isolates. The samples were analyzed with both PCR methods, direct microscopy, and culture. PCR was performed straight from sample material (skin/nail) with patient samples, and from culture material with other dermatophyte isolates.

Results: Of the 46 patient samples that were initially culture negative, 12 were positive in direct microscopy, suggesting possible dermatophyte PCR positivity. In most of these samples, both PCR methods detected a dermatophyte species.

<table>
<thead>
<tr>
<th></th>
<th>Primary microscopy and culture negative</th>
<th>Primary microscopy positive, culture negative</th>
<th>Primary culture positive for a yeast/mold/a saprophytic mixed growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUROArray Dermatomycosis result:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>31</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Dermatophyte</td>
<td>2</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Dermatophyte + yeasts/mold</td>
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<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Yeasts/mold</td>
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<td>4</td>
</tr>
<tr>
<td>Total</td>
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<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Pathonostics Dermagenius 2.0 result:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>32</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Dermatophyte</td>
<td>2</td>
<td>7</td>
<td>2</td>
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<tr>
<td>Dermatophyte + yeasts/mold</td>
<td>0</td>
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<td>Yeasts/mold</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>12</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 1. Results of culture negative patient samples.

In all of the patient samples that were culture positive for a dermatophyte in primary diagnostics, the species identified in culture was Trichophyton rubrum. Most of the PCR results were consistent with primary diagnostics.
Of the 21 preserved dermatophyte isolates, most PCR results were consistent with primary diagnostics; discrepant results were possibly due to the inability of traditional methods to distinguish closely related species. In two cases the two PCR methods identified a different species, however, the species were closely related. Four samples were negative with Pathonotics DermaGenius 2.0, since the method does not detect *Nannizzia*-species.

**Conclusion:** Both methods were able to detect dermatophyte species in samples that were negative with traditional diagnostic methods. The specificity of both methods seems good. EUROArray Dermatomycosis seems somewhat more sensitive, and the method is able to detect more species than Pathonotics DermaGenius 2.0. The workflow of EUROArray Dermatomycosis is however more time consuming and requires special laboratory equipment. Interpretation of results with EUROArray Dermatomycosis is more automated, while Pathonotics DermaGenius 2.0 requires more hands-on interpretation. Desired species panel, laboratory equipment and workflow should be considered when choosing a method for molecular dermatophyte diagnostics.
Abstract N°: 4975

USE OF 365nm LED ULTRAVIOLET LIGHT IN THE DIAGNOSIS OF SCABIES

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Introduction & Objectives:

Scabies is a skin infestation whose incidence is increasing in our society in recent years. Early diagnosis at all health levels implies a lower probability of spread and minimize health spending. We present a diagnostic tool that could be useful in the diagnosis of scabies.

Materials & Methods:

We present the case of a 66-year-old woman who presented with intense generalized pruritus after a trip abroad. Physical examination and manual dermoscopy confirmed the presence of multiple acarine grooves and a symmetrical papular eruption on the trunk and thighs. Subsequently, with the use of a 365nm ultraviolet (UV) lamp, shiny bluish-white structures corresponding to the different parts of the mite groove were observed, supporting the diagnosis of scabies.

Results:

The acarine groove is a pathognomonic sign of scabies well known by dermatologists. Until now, the visualization of the mite by light microscopy, a technique known as the Müller test, is still the gold standard diagnostic technique. However, this technique requires contact with the patient, training and having the specific material for its performance. The use of 365nm UV LED light emits a bluish-white luminescence visible to the naked eye. Through this apparatus we can visualize a bright spot corresponding to the body of the mite and a bluish-white tunnel.

Conclusion:

This technique seems to establish itself as a new diagnostic tool through in vivo and in situ visualization of the Sarcoptes Scabei mite and its derivatives when illuminated with 365nm UV light. In addition, compared to the Müller test, it offers the advantage of not requiring direct contact, being a fast technique, and using only a specific lamp.
Abstract N°: 4978

Unusual presentations of leprosy with high bacillary load in post elimination era - A Resurgence?

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Introduction

Leprosy is a chronic mycobacterial infection caused by Mycobacterium leprae. India achieved the elimination of leprosy in 2005, defined as less than 1 case per 10,000 population. Despite being eliminated, India has the highest number of leprosy cases in the world, and thousands of new cases are detected every year.

Case series:

We present a case series of 10 patients of Hansen’s disease with various clinical manifestations of leprosy with high bacillary load in a tertiary care hospital in western Maharashtra. These manifestations include patients with epistaxis and nasal myiasis, numerous skin-colored raised lesions over the scrotum, resorption of digits over both legs, pterygium over both eyes, fever, and joint pain, multiple erythematous plaques over the body, anetoderma caused by long-term topical steroid use, multiple keloidal lesions over both ears, solitary ulcer on the right leg, and untreated histoid leprosy.

Discussion

Leprosy also known as Hansen’s disease is caused by acid-fast bacilli mycobacterium leprae, which is an obligate intracellular organism with a long incubation period of two months to six years, affecting the skin and peripheral nerves. It can also affect the mucous membranes, eyes, nose, joints, lymph nodes, internal organs, and bones. Lepromatous leprosy in its advanced stages manifests as disfiguring mutilation, madarosis, xerosis, epistaxis, joint pain, extremity edema, cutaneous ulcers, and plantar trophic ulcers. Many recent studies conducted in a post-elimination era in our country have concluded a high percentage of multibacillary cases and child leprosy cases, suggesting active transmission of the disease.

Conclusion:

Although leprosy has been declared eradicated by the WHO, clinical suspicion of leprosy should always be maintained in cases presenting with skin lesions and nerve impairment. Deformities in patients can be avoided with proper clinical suspicion, early diagnosis, and treatment, and the transmission of leprae bacilli to society can be reduced.
Abstract N°: 4998

Case report: erythema induratum of Bazin

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Introduction & Objectives:

The erythema induratum of bazin is a rare form of panniculitis, which result from a hypersensitivity reaction to Mycobacterium tuberculosis. The clinical presentation can be diverse and mimic other cutaneous diseases.

The diagnostic criteria for this pathology and its association with tuberculosis is based on the correlation between cutaneous characteristics, positive tuberculin tests, the identification of active tuberculosis in other organs, the histopathological elements of the lesions, and the response to therapy.

Despite being a preventable and curable disease, tuberculosis is still an endemic problem in several countries.

Materials & Methods:

This report presents a case of erythema induratum of Bazin, a rare cutaneous manifestation of tuberculosis classified as a tuberculid skin eruption.

Results:

A 34 year-old female patient, with a previous history of arterial hypertension since 1 year, depression for 4 years. Admitted to our department for skin lesions of both legs evolving in flare-ups and remissions for the past 24 years, with worsening pain, without pruritis. The whole evolving in a context of apyrexia and asthenia. She had no history of night sweats or respiratory symptoms.

Clinical examination found an indurated, sclerotic, atrophic, purplish erythematous placard on the lower left leg with edema on the homolateral ankle.

We also found varicose veins of the lower limbs and subcutaneous erythromatous and purplish nodules on the right leg, painful and mobile. On dermoscopy examination: Erythematous background, fine whitish scales and polymorphic vascularization: telangiectasias, spotty vascularization and glomerular vascularization.

A skin biopsy showed a lobular granulomatous panniculitis represented by large lympho-histiocytic infiltrates with epithelioid and giant cell granulomas with infiltration of the vascular walls. There were no caseating granulomas nor acid-fast bacilli. So, the diagnosis of erythema induratum of Bazin was made.

Laboratory workup showed raised erythrocyte sedimentation rate (70mm/h), C-reactive protein was elevated (61,5 mg/l), The tuberculin intradermal reaction was 44 mm.

The rest of the investigations, including serological tests for hepatitis B, hepatitis C, human immunodeficiency virus, and syphilis and immunological study were normal. Further investigations excluded pulmonary tuberculosis.

The patient was treated with Antituberculous and analgesic treatments.

Conclusion:

Erythema induratum of bazin is a rare subcutaneous granulomatous disease caused by an autoimmune reaction
to M. tuberculosis, the most frequent location is lower extremities. It accompanies diabetes. Its histology is characterized by lobular panniculitis with vasculitis. The majority of cases respond to antituberculous treatment.
**Abstract N°: 5036**

**Case report: Recurrent Hypodermatitis following Intramuscular Injection of Anabolic Steroids**

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\(^1\)Mohammed 6 University Hospital Marrakech, Dermatology, Marrakech

**Introduction & Objectives:**

Anabolic steroid use has become increasingly prevalent in recent years, particularly among athletes, bodybuilders, and individuals seeking to enhance their physical performance or appearance. Among the numerous complications associated with anabolic steroid administration, recurrent hypodermatitis stands out as a particularly rare side effect. We report a case of a recurrent hypodermatitis following intramuscular injection of anabolic steroids.

**Materials & Methods:**

Case report

**Results:**

A 31-year-old male patient presented to the emergency department with a 10-day history of painful, warm, and erythematous swelling in both arms and thighs. The patient had a known history of steroid-induced diabetes for the past 6 years and had been self-administering anabolic steroids (Nandrolone, trenbolone, Methandrostenolone) for the past 7 years. This episode marked the sixth occurrence of recurrent hypodermatitis following steroid injections. General examination revealed a conscious and stable patient with an elevated body temperature of 40°C. Palpable lymph nodes were not detected, and the patient’s skin appeared smooth with extensive non-demarcated swelling in the affected areas. Confluent nodules were appreciated upon palpation, while other skin findings such as necrotic lesions, blistering, or purpuric lesions were absent. Mucous membranes and appendages appeared normal. Laboratory results showed an elevated white blood cell count (19,000), increased C-reactive protein level (389), and a fasting blood glucose level of 3.25. Other laboratory parameters were within normal limits.

A skin biopsy was performed, revealing an inflammatory infiltrate with diffuse fibrosis.

The patient was started on amoxicillin-clavulanate 4g/day for 7 days.

The patient showed significant improvement.

**Conclusion:**

The pathogenesis of recurrent hypodermatitis in the context of anabolic steroid misuse remains unclear. However, the inflammatory infiltrate observed in the skin biopsy of our patient, along with the presence of diffuse fibrosis, suggests a significant immune response and tissue remodeling. This can be explained by chronic infections due to poorly sterilized injection materials or due to the injected material itself. Many cases of cutaneous and visceral infectious complications linked to anabolic steroid injections have been reported in literature. Furthermore, the injection of synthol can cause localized inflammation and fibrosis at the injection sites, similar to the complications observed with anabolic steroid. And it would explain the recurring nature of the hypodermatitis.
Abstract N°: 5053

A retrospective clinico-epidemiological study of leprosy cases at a tertiary care hospital

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Introduction & Objectives:

Leprosy is a communicable disease caused by Mycobacterium Leprae. Despite the multidrug regimen, leprosy remains a public health scourge.

This study aims to describe the clinical and epidemiological spectrum of leprosy patients at a tertiary care center.

Materials & Methods:

It is a Record-based, retrospective, descriptive study. Case records of leprosy patients treated at a tertiary care hospital over four years were studied. 139 cases that fulfilled the World Health Organization’s 1998 case definition of leprosy and whose case records were complete with a basic demographic, case history, examination, and treatment details were included in the study. Data were compiled in MS Excel.

Results:

Majority cases i.e 91 (65.5%) were multibacillary and the rest were paucibacillary. 94 cases (67.6%) were males and 35 cases (25.18%) were females. There were 10 children diagnosed with leprosy. 3.5% of patients were below 10 years of age. 24.46% of cases belonged to the lower socioeconomic status as per the modified Kupuswammy classification of socioeconomic status.

Positive contact tracing could be elicited in 8 (5.76%) of cases.

Thirty two (23.02%) cases had documented leprosy reactions out of which 28 cases (20.14%) were in type 1 reaction and four cases (2.9%) experienced type 2 reaction.

Grade 2 disability accounted for 16.05% cases and grade 1 disability in 25.9% cases.

<table>
<thead>
<tr>
<th>TYPE OF LEPROSY</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAUCIBACILLARY</td>
<td>48 (34.53%)</td>
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<tr>
<td>MULTIBACILLARY</td>
<td>91 (65.5%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REACTIONS</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE 1</td>
<td>28 (20.14%)</td>
</tr>
<tr>
<td>TYPE 2</td>
<td>04 (2.9%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>32 (23.02%)</td>
</tr>
</tbody>
</table>
### Conclusion:

The present study provides an insight into disease burden as well as the effectiveness of health services at a tertiary care hospital. The study highlights the importance of early diagnosis and management of leprosy and reactions, thereby minimizing deformities and disabilities.

Important point to emphasize is a delay in diagnosis which leads to the progression of the disease, reactionary episodes, and consequent sequelae in the form of permanent deformities leading to preventable deformities and disabilities. The major reason for this could be a suboptimal awareness and stigmatization of the disease in the community. Thus, the need for early detection and effective management of leprosy cases in the community, decreasing the time lag between first symptom and diagnosis, universal health coverage with a focus on children, women, and underserved populations like displaced and migrant population and contact tracing and surveillance.
Nodular Vasculitis Associated To Mycobacterium tuberculosis: Two Case Reports

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Introduction

Cutaneous tuberculosis occurs in 1-1.5% of extrapulmonary tuberculosis cases. We present two cases of hypersensitivity response to Mycobacterium tuberculosis antigens, known as Erythema induratum of Bazin (EIB).

Case reports

Case 1: 41-year-old female, with history of congestive heart failure. Presents a 4-month history of painful subcutaneous erythematous ulcerated nodule on the right arm, draining purulent material. Subsequently new lesions appeared on legs, antibiotics were given with lack of improvement. She was referred to our dermatology department with sclerotic, hyperpigmented and tender plaques on shins and thighs. A deep skin biopsy was performed; histopathological changes were consistent with septal and lobular panniculitis and tuberculous granulomas; interferon-γ release assay for tuberculosis was done with a positive result and multi-drug treatment was established.

Case 2: 46-year-old female, with multiple suspected asthma exacerbations treated with systemic steroids, presented subcutaneous nodules on buttocks and abdomen. Six months later, new erythematous subcutaneous nodules appeared on the abdomen, arms and legs with drainage of serous material, treated with topical antibiotics. She was referred to our dermatology clinic, with subcutaneous violaceous nodules and sclerotic cutaneous plaques on the abdomen, thighs and shins. A deep skin biopsy was performed; histopathological findings included focal fat necrosis and fibrosis. Topical clobetasol had no response. A new skin biopsy was performed and reported septal panniculitis, nodular vasculitis and tuberculoid granulomas. Due to persistence of respiratory symptoms, a thoracic CT was performed demonstrating solid nodules on the median lobe. Interferon-γ release assay for tuberculosis was done with a positive result and multi-drug treatment was established.

Discussion

EIB was described in 1861 as a hypersensitivity skin reaction against Mycobacterium tuberculosis infection. It occurs in middle-aged women with a chronic course. It presents clinically as firm violaceous or ulcerated subcutaneous and painful nodules and plaques with a predilection for the calves. Histopathologic features include lobular panniculitis with vasculitis, as well as granulomatous inflammation with caseous necrosis and multinucleated giant cells.

The diagnosis criteria for EIB are:

1. Chronic inflammatory nodules predominantly on the legs.
2. Evidence of Mycobacterium tuberculosis infection.

The diagnosis is confirmed by the positivity of the interferon-γ release assay for mycobacteria. The main differential diagnoses are erythema nodosum, lupus, pancreatic panniculitis or α-1 antitrypsin deficiency. Patients
with EIB must receive multi-drug regimen of tuberculosis treatment. It has been reported in the literature that after 6 months of therapy, lesions show significant improvement.

**Conclusion**

Even though the number of cases is decreasing in most countries, evaluation for *Mycobacterium tuberculosis* in patients with multiple violaceous nodules on the lower extremities should be considered. Because this is an uncommon clinical presentation of tuberculosis, a delay in diagnosis can result in administration of ineffective and damaging treatments.
Cutaneous leishmaniasis: contribution of confocal microscopy

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Introduction & Objectives:

Cutaneous leishmaniasis (CL) is an intracellular parasitic infectious skin disease. It may have various clinical presentations ranging from a solitary papule to large, ulcerated plaque or tumoral lesion, which can lead to confusion with several dermatological pathologies. The dermal smear often allows the diagnosis. In doubtful cases, dermoscopy brings a precious help while histology and/or PCR are sensitive but expensive and invasive method. We report the contribution of reflectance confocal microscopy (RCM) for the diagnosis of leishmaniasis in one case and for follow-up under treatment in 2 cases.

Materials & Methods:

We describe the in vivo confocal microscopic features of cutaneous leishmaniasis using the VivaScope® 1500, and finding a correlation with dermoscopy and histopathology.

Results:

Case 1: A 17 years old patient, presented with a 5cm nose tumor centered by an ulceration. Dermoscopy of the edges of the lesion showed comma vessels and yellow teardrops. The diagnosis of leishmaniasis was suspected but the cutaneous smear for leishmania bodies was negative.

RCM showed multiple inflammatory cells in the papillary dermis, including dendritic cells surrounding rounded nests; juxtaposed with the follicular plugs. The nests were delimited by intertwined hyperreflective fibers within which were found large luminous structures. Granulomas and follicles gave the appearance of eggs in a bird’s nest. The histopathology was consistent with CL. Immunohistochemistry showed a CD1a staining of dendritic cells, corresponding to a “nest” of langerhans cells. The bright round cells were CD68 positive, corresponding to leishmania bodies inside the “egg”.

Leishmania bodies seen within granulomas on RCM were the key feature in the initial diagnosis.

Case 2: 62 years old woman followed for a cutaneous discoid lupus under anti-malarial drugs and topical steroids. A CL was diagnosed upon her discoid lupus lesions on the face. She was first treated by intralesional glucantime injections and topical aureomycin for two months. Then, a sequential treatment with clarithromycin was given for two other months with a slight improvement.

Case 3: 4 years old girl presenting with a resisting cutaneous leishmaniasis upon a pretragean fistula. Cutaneous smear for leishmania bodies was consistently positive after intraleisional glucantime treatment combined with dynamic phototherapy with methylene blue.
RCM of case 2 and 3 showed multiple large bright cells in the papillary dermis that could correspond to leishmania bodies around the hair follicles.

**Conclusion:**

Although smear and histopathological evaluation are the gold standard in the diagnosis of leishmaniasis, RCM can be considered as a valuable diagnostic tool in vivo of CL, especially in cases with atypical presentation as the first patient, and for monitoring of resistant cases under treatment.
Abstract N°: 5079

A wolf in sheep’s clothing: Unraveling the mystery of an unusual case of Disseminated Histoplasmosis in an Immunocompetent Individual.

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Introduction & Objectives:

Histoplasmosis is typically associated with immunocompromised individuals; however, we present a rare case of disseminated histoplasmosis in an immunocompetent 23-year-old woman with atypical cutaneous and mucosal manifestations. This case report aims to describe the diagnostic evaluation, treatment approach, and clinical outcome of this unique presentation.

The objectives of this case report are:

1. To highlight the unusual presentation of disseminated histoplasmosis in an immunocompetent individual with cutaneous and mucosal involvement.
2. To outline the diagnostic evaluation methods employed to confirm the diagnosis.
3. To describe the treatment approach utilized for effective management.
4. To report the clinical outcome and long-term remission achieved in this case.

Materials & Methods:

A comprehensive diagnostic evaluation was conducted, including clinical assessment, histopathological examination, staining techniques (Periodic acid-Schiff stain, Grocott-Gomori’s methenamine silver stain), KOH stain, and culture analysis. Baseline blood parameters, immune status markers, imaging studies, and serological tests were also performed.

Results:

Histopathological examination of biopsy from both cutaneous and mucosal lesions showed numerous basophilic bodies with peripheral halo within the macrophages and giant cells which were more prominent on Periodic acid-Schiff stain and these bodies stained black with Grocott-Gomori’s methenamine silver stain.

On KOH stain of the tissue, multiple budding yeast cells were seen and when this tissue was cultured in Sabauraud dextrose agar (SDA) medium on 37°C, white-cottony mould form grew, which on Lactophenol cotton blue stain showed characteristic tuberculate macroconidia and numerous smooth walled microconidia.

Bone marrow biopsy findings further supported the diagnosis of disseminated histoplasmosis. The patient was found to be immunocompetent with normal CD4 percentage.

Conclusion:

This case report highlights the importance of considering disseminated histoplasmosis as a differential diagnosis, even in immunocompetent individuals presenting with unusual cutaneous and mucosal lesions. Prompt diagnosis and initiation of treatment with liposomal amphotericin-B followed by oral itraconazole resulted in significant improvement and sustained remission at the 2-year follow-up.
This case contributes to expanding the knowledge of unusual presentations of histoplasmosis and emphasizes the efficacy of the chosen treatment approach. Further research and awareness are needed to enhance recognition and management of similar cases.

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Abstract N°: 5099

Tinea capitis - treatment options in children – retrospective study

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Introduction & Objectives: Tinea Capitis represents the most common dermatophytosis of childhood. It affects prepubertal children especially between the ages of three and seven years old and it requires systemic treatment in order to penetrate the hair follicle. Terbinafine is the available and preferred systemic agent in our department. In our experience, Terbinafine is well tolerated and efficient in clearing the condition.

This paper’s purpose is to objectify the tolerance of Terbinafine in our pediatric population and its effectiveness in curing the disease.

Materials & Methods: a retrospective, transverse study was performed on 49 pediatric patients with various clinical manifestations and severity of tinea capitis admitted in our unit. The study was carried out from May 2021 to May 2023 in the Pediatric Dermatology Department of Colentina Clinical Hospital, Bucharest, Romania.

Results: Our cohort had 46 subjects and no significant difference regarding gender distribution was noticed (M : F = 25 : 24). Mean age was 7.6 years old, with the youngest patient being one year old and the oldest being 17 years old, most of them living in urban areas. We identified that the most affected area of the scalp was the parietal area (~19.56%), followed by the occipital area (~15.21%) and the frontal one (~13.04%). The microscopic diagnosis was performed for 38 patients and the most common pathogen identified was Microsporum spp. Topical treatment was recommended to all of the children and the systemic treatment was prescribed for 38 patients (~83%). The doses of Terbinafine were adjusted according to the current guidelines depending on the child’s weight and age. The average therapy period was 6.7 weeks (range 4-12 weeks). The possible adverse effects of oral antifungal therapy are known so that the treatment was carefully and periodically monitored. Mild and transient adverse reactions were observed as CBC abnormalities (~39%) (mostly leukopenia). All hepatic enzymes levels were within normal limits.

Conclusion: Terbinafine is an allylamine antifungal agent demonstrated to be effective as therapy for Tinea Capitis. The oral form has an excellent safety profile and nowadays is the most commonly used systemic antifungal agent in Europe although it is known that elevated hepatic transaminases and cytopenias are occasionally seen. In our study Terbinafine proved to cure the disease with negative mycological exams. We did not have any case of hepatocytolysis but we observed some cases of leukopenia. Fortunately, it was not significant so that the patients carried on the treatment.
Abstract No: 5157

Leprosy in modern era – five year study of leprosy cases in a tertiary care centre from east ksa:

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Introduction & Objectives: Leprosy has been eliminated from most parts of the world with diminishing cases each day, while its presentation is getting more atypical and challenging with most of the patients coming to dermatologist in lepra reactions. The study is done to identify demographic patterns of leprosy in eastern region of Saudi Arabia.

Materials & Methods: A prospective hospital-based study involving all leprosy patients visiting Dermatology outpatient clinic from May 2017 to May 2023.

Results: A total of 17 patients visited dermatology clinic during the study period (6 years) of which 16 were male (94.2%) and 1 female (5.8%). Most of the patients (47.06%) were 30 to 40 years old. Patients from Indian nationality were mostly affected (59%), followed by Nepal (23.52%), Bangladesh (11.7%), and Sudan (5.8%). Multibacillary disease was more common in males (76.4%) than females (5.8%). Lepromatous leprosy was the most common (64.7%) type of leprosy seen, followed by borderline lepromatous leprosy (23.5%) and borderline tuberculoid leprosy (11.7%). Majority of LL patients were in reaction (82%).

Conclusion: Leprosy still continues to be a persistent in gulf countries and is misdiagnosed till late stages until it reaches dermatologist. The possible reasons being lack of expertise in diagnosing Hansens in this region due to rarity of cases in this area, and delay in reaching dermatologist due to various reasons. Most of the cases in this study are from India and Nepal who are from low socio economic classes and they tend to delay treatment until late stages.
Abstract N°: 5251

Ecthyma gangrenosum that revealed an agammaglobulinemia : a case report

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Introduction:

Ecthyma Gangrenosum is a characteristic dermatologic manifestation of severe and invasive infection caused most commonly by Pseudomonas aeruginosa. It usually occurs in patients immunocompromised; we report a case of ecthyma gangrenosum in previously healthy child, leading to the diagnosis of agammaglobulinemia.

Case report:

A 4-month-old male was admitted to emergency after experiencing five days of fever reaching 39.9 and two days of a perineal necrotic lesions. He was previously healthy, and had no known family history of immunodeficiency. On physical examination, he was well developed with a toxemic appearance, lethargic and febrile. On skin examination: a purple necrotic lesion on the face, which began as a pink macule and progressed to a necrotic lesion with scar formation, surrounded by an intense red areola. Other lesions with the same aspect were disseminated on the scrotum and the left tight.

The laboratory findings were: peripheral White Blood Cells count 19270/mm³ of which 40% were neutrophils, 30% were lymphocytes; C-reactive protein was 190 mg/dL. The antibiotic treatment was initiated with intravenous ceftazidime; metronidazole, and gentamicin. During the second day, the infant underwent surgical debridement of the necrotic lesions, the Pseudomonas aeruginosa was isolated from the surgical sample, and it was sensitive to ceftazidime and gentamicin. A complete workup for immunodeficiency was made in association: The HIV virologic test was negative. The serum immunoglobulins test revealed low levels of: IgG 3.2 g/L, IgA 0.25 g/l, and IgM 0.28 g/L. Complement components (C3, C4, and CH50) were normal and the number of circulating B lymphocytes (CD19, CD20) was less than 1%. After the empirical use of immunoglobulin (400 mg/kg), he was discharged after 10 days of hospital stay, there were no further appearances of new skin lesions.

Discussion:

Pseudomonas aeruginosa generally causes infection in patients with immunodeficiency conditions. Hence, the presence of the bacteria infection in healthy children is very uncommon. One manifestation considered by some authors as characteristic of P.aeruginosa septicemia is the skin lesion called ecthyma gangrenosum which is a severe potentially lethal cutaneous infection that progresses sequentially: The characteristic clinical appearance is red maculae that progress to a hemorrhagic bluish bullae that rupture to form a central area of necrosis surrounded by an erythematous halo. The main site of EG lesions is the gluteal or perineal region, although this lesion can spread to other body sites. In two retrospective studies, all the patients with ecthyma gangrenosum were immunocompromised leading to severe neutropenia. In our patient, the diagnosis of Bruton agammaglobulinemia was confirmed by his extremely low concentration of all the immunoglobulin isotypes, profound decrease in circulating B-lymphocytes, normal lymphocyte count and normal cell-mediated immunity, and complement.

Conclusion:
Ecthyma gangrenosum due to P. aeruginosa is potentially life-threatening. In previously healthy children, immunological evaluation is important to rule out an underlying immunodeficiency.
Abstract N°: 5254

The relationship between psoriasis and viral infection

Nichang Fu*¹, Xiaoyong Man¹

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Introduction & Objectives: Infections, include bacterial, viral, fungal and parasitic, may exacerbate the course of psoriasis. Microbial pathogens have highly co-evolved relationship with the immune system at barrier tissues, especially in the skin, which means that the interaction between infection and the immune system may play a certainly important role in the pathogenesis of psoriasis. However, previous studies mostly focus on bacterial infection, we wish to clarify the role of virus in psoriasis.


Results: Virus may predispose patients to developing psoriasis since the pathophysiological factors due to overproduction of inflammatory cytokines between viral infection and psoriasis. Although HIV infection leads to the depletion of CD4+ T lymphocyte, the degree of skin lesions in HIV-infected and acquired immunodeficiency syndrome (AIDS) patients is significantly greater than in the general population, because of immune dysfunction and abnormal proliferation of Keratinocytes. HPV, which was found in various proliferative lesions of epithelial origin, triggers plaque-type psoriasis by upregulating NGF. Moreover, several studies have reported new-onset or aggravate psoriatic lesions in the context of COVID-19 infection.

Conclusion: Psoriasis may be exacerbated due to virus infection.
Parinaud’s oculoglandular syndrome: coinfection by Bartonella henselae and Sporothrix brasiliensis

Cintia Souza1, Isabella Prado Motta1, Sayros Akyro Soares Martin1, Elisa Nunes Secamilli1, Rafael Santelli Stelini1, Lais Pontes1, Marina Rovani1, Paulo Eduardo Neves Ferreira Velho1

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Introduction & Objectives:
Parinaud’s oculoglandular syndrome (PGOS) can be a zoonosis transmitted by contact with cats. We report the case of a man, owner of cats, with SOGP in which Sporothrix brasiliensis and Bartonella henselae were identified in the conjunctival lesion.

Materials & Methods:
Review of the medical record of a patient treated at a tertiary care University Hospital.

Results:
A 52-year-old man presented with an ulcerated lesion on the left lower bulbar conjunctiva, which had evolved for 2 months, associated with enanthema. He reported high fever and painful left cervical lymphadenopathy, not fistulized, of the same time of evolution. He denied local or family trauma with similar injuries. He reported contact with three cats, one of which had been euthanized 3 months ago, due to an ocular ulcerated lesion diagnosed and surgically treated as a malignant neoplasm. The patient had previously been treated with azithromycin for 5 days and cephalexin for 7 days, without any improvement. On physical examination, an ulcerated lesion measuring 0.6 in diameter was observed in the lower left palpebral region, in addition to two satellite papulo-erythematous lesions measuring 0.3 cm in the upper palpebral region and in the homolateral zygomatic region. Ophthalmological examination showed enanthema and keratitis. Biopsies of the ulcerated lesion and zygomatic lesion were performed. The fragments were sent to anatomopathological examination, to direct research and to culture of fungi and mycobacteria, to gender-specific polymerase chain reactions (PCR) for Leishmania sp. and species-specific reaction for B. henselae. The search for B. henselae was also performed on a blood sample from the patient. The anatomopathological study of both samples showed a chronic granulomatous inflammatory process with necrosis and suppuration, without the presence of asteroid bodies. A fungus from the Sporothrix schenckii complex was isolated and later identified by sequencing as Sporothrix brasiliensis. Furthermore, B. henselae DNA was detected in the patient’s conjunctival tissue and blood despite previous use of azithromycin. Given the clinical condition and the complementary investigation, the hypothesis of SOGP by S. brasiliensis and by B. henselae was made. Doxycycline 200 mg/day and itraconazole 200 mg/day were prescribed. After ten days of treatment, the patient presented resolution of lymphadenopathy and improvement of the ocular lesion. The patient used doxycycline and itraconazole for one and four months, respectively.

Conclusion:
Coinfection by the two agents, confirmed in the patient presented, may be caused by symbiotic facilitation between them. Patients with SOGP and/or skin lesions and contact with cats should be investigated for infection by both agents, and the facilitation between these bacterial and fungal infections should be further studied.
Translation and Validation of a Filipino Version of the ENLIST ENL Severity Scale

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Introduction & Objectives:

ENLIST ENL Severity Scale is a 10-item severity scale administered by HCPs in monitoring and treating persons with Hansen’s Disease with ENL in an objective manner. While English is one of the primary languages of the country, it still carries translation risk. Thus, it would be helpful to translate the EESS from English to Filipino to increase its effectiveness. The main objective is to translate and validate a Filipino version of the ENLIST ENL Severity Scale for persons with Hansen’s Disease with ENL.

Materials & Methods:

This study will mainly consist of three phases: translation, face and content validation, and itemized validation using a (5)-level Likert Scale.

Results:

Three experts were invited to assess the face validity of the translated EESS Filipino Scale during the finalization of the EESS Filipino Scale. Face validity was also assessed by HCPs during the pilot testing and validation proper study. Major and minor comments were documented and revised.

Pre- and post-assessment summary of the pilot testing to 30 HCPs was summarized and the p-values were computed using the Chi-square Goodness of Fit Test and P-value < 0.05 was considered significant. Significance was important especially in some of the items that had major changes after the comments and suggestions were revised into the pre-final translated scale.

The average scores of each dimension (fluency, adequacy, meaning, and severity) was computed with 95% confidence interval in the validation proper testing results of 154 HCPs participants. More than half of the proportion (0.5 or 50%) is considered passed, which means, given the criteria of each item is considered as properly translated. All the items had more than half of the proportion which is considered passed and properly translated.

Conclusion:

The Filipino EESS carries a reliable and valid translation of its English version in evaluating the severity and detecting clinical change in persons with Hansen’s Disease with ENL.
Double Mask Sporotrichosis: Erythema Nodosum and Erythema Multiforme After Feline Exposure

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Introduction & Objectives: Sporotrichosis is a subcutaneous mycosis caused by the fungal species complex Sporothrix. In Brazil, the epidemic of urban sporotrichosis is caused by the species S. brasiliensis, with varied clinical manifestations. Erythema nodosum and erythema multiforme are hypersensitivity skin reactions that may be associated with various infections, including fungal infections. The association of these conditions with sporotrichosis is rare.

Case report: This case reports a 56 years old female, with multiple skin lesions with 15 days of evolution which started as erythematous papules on the upper and lower limbs and evolved into plaques of multiple diameters with centrifugal growth, originating erythematous concentric annular lesions, some of them with a purpuric center surrounded by a ring of vesicles, resulting in the classic target lesion. The lesions on the right upper limb were distributed in a linear arrangement, following the path of the lymphatic vessels.

In addition, reported the appearance of subcutaneous nodules on the legs anterior surface, which were intensely painful, as well as palpable inguinal lymph node enlargement and joint edema of the left knee and ankle. The patient had a feline pet, with active skin lesions and a recent diagnosis of sporotrichosis. She denied any bite or scratch.

Discussion: Sporotrichosis is a subcutaneous infection that occurs worldwide and is endemic in our country. Infection usually occurs after traumatic inoculation of the fungus into the skin, through wounds caused by thorns, contaminated wood or soil, or by bites or scratches from infected cats. Typical symptoms are skin lesions that can range from acne-like nodules to ulcers. However, the simultaneous development of erythema nodosum, erythema multiforme and reactive arthritis, as reported in the case above, is a rare and atypical event with little documentation in the literature.

Conclusion: This report highlights the importance of recognizing atypical skin presentations as hypersensitivity reactions to sporotrichosis, especially when there is contact with a cat already affected by the disease and without signs or history of bites, only through contact with the sick animal, thus allowing adequate treatment.
Introduction & Objectives:

Monkeypox (MPX) is an endemic zoonotic disease in Africa. Several outbreaks of MPX have been reported in non-endemic countries such as Spain, the United Kingdom, and Portugal in the last year. Despite the widespread use of dermatoscopy as a non-invasive diagnostic tool for studying various dermatoses, the literature lacks sufficient publications on vesiculopustular infectious dermatoses. Limited studies have explored the dermatoscopic manifestations of MPX, with its differential diagnosis encompassing varicella-zoster virus infections (presenting as chickenpox or herpes zoster), which is one of the key differential diagnoses to consider. The aim of this study is to compare the dermatoscopic findings between MPX and chickenpox or herpes zoster.

Materials & Methods:

A case-control study was conducted, comprising dermatoscopic images from 5 patients with confirmed MPX and 5 control patients diagnosed with chickenpox or herpes zoster. Two dermatologists, specialized in dermatoscopy, analyzed the images, while also recording the clinical and demographic characteristics of the subjects.

Results:

Dermatoscopy of MPX is distinguished by a prominent white bright halo and the presence of pinkish rounded structures (clods), whereas chickenpox or herpes zoster exhibited a grayish or skin-colored halo and brown clods. Both entities exhibited erosion-crust and a red background.

Conclusion:

Dermatoscopy emerges as a valuable and expeditious tool for effectively distinguishing between MPX and chickenpox/herpes zoster in differential diagnoses.
Abstract N°: 5413

Intergluteal migratory linear eruption - differential diagnosis of cutaneous larva migrans and larva currens: report of two brothers

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Introduction & Objectives: Cutaneous larva migrans (CLM) is a parasitic cutaneous infestation caused by multiple types of hookworm larvae (Ancylostoma spp, Uncinaria stenocephala), typical for warm climates. CLM is also known as creeping eruption, since after penetration through direct skin contact, the larvae migrate under the skin and cause pruritic red linear tracts. CLM is distinguished from the cutaneous manifestation of systemic Strongyloides stercoralis infection (strongyloidiasis), termed larva currens, similarly presenting as migratory linear eruption beginning in the perianal region. Unlike CLM, impaired immunity in strongyloidiasis can lead to dissemination and hyperinfection with high mortality rate.

Materials & Methods: We present 2 brothers, aged 5 and 7, with a 3-month history of pruritic perianal lesions. The lesions initially appeared as papules, then migrated and reached a few centimeters in size. Prior to the appearance of lesions, children were on a vacation in an endemic area where children were playing on a beach without swimming pants.

Results: On examination, both children presented with perianal linear elevated erythema with a papule at the end of the erythematous line. They were complaining on perianal itch; also, boys complained of periodical periumbilical abdominal pain. Routine laboratory tests were normal; elevated IgE, 164 IU/mL (normal <60), was found in the older brother. The eruption was migrating <1 cm/day. Standard stool examinations, for 3 consecutive days, was performed for eggs and parasites and 5 tape test examinations for pinworm were all negative. Serological testing for Strongyloides (IIF test) was negative. The patients were treated with 2 doses of ivermectin, 4 weeks apart due to persistent pruritus (initially 200 µg/kg, then 400 µg/kg).

Conclusion: CLM and larva currens are transmitted from warm soil contaminated with animal feces through direct skin contact. CLM affects lower extremities, rarely intergluteal region. Larvae cannot penetrate the basement membrane, so the disease remains confined to the epidermis, without systemic signs or laboratory disruptions. Strongyloides penetrates the basement membrane causing systemic infection, larva currens becoming a chronic autoinfection since larvae reenter perianal skin. The differences between CLM and larva currens are listed in Table 1. ELISA test is considered the gold standard for the diagnosis of chronic strongyloidiasis. Although the IIF test, which does not have such a high sensitivity, and which was only available to us, was negative, larva currens could not be excluded, due to chronic course of the lesions, typical perianal involvement and GI symptoms.

Given that possible hyperinfection and even death may supervene, clinicians should perform strongyloidiasis serology tests and administer anthelmintics to patients with characteristic lesions and history positive for travel to endemic areas.

Table 1. Differential diagnosis of cutaneous larva migrans and larva currens
<table>
<thead>
<tr>
<th><strong>Cutaneous larva migrans</strong></th>
<th><strong>Larva currans</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Infection caused by <em>Ancylostoma braziliense</em>, <em>Ancylostoma caninum</em>, <em>Uncinia stenocephala</em></td>
<td>Chronic autoinfection caused by <em>Strongyloides stercoralis</em></td>
</tr>
<tr>
<td>Linear migratory eruption starts at the site of skin contact with the larvae (most commonly affected are the feet, spaces between the toes, hands, knees and gluteal area)</td>
<td>In the acute phase directly after penetration, patients may get a mildly itchy rash that often occurs at the site of larval skin penetration, usually on the feet. Strongyloidiasis can become chronic from persistent infection. In that case, recurrent migratory linear rashes known as larva currans, begin in the perianal region.</td>
</tr>
<tr>
<td>Larvae migrating slowly (1-2 cm per day)</td>
<td>Larvae migrating much faster (5-10 cm per day)</td>
</tr>
<tr>
<td>The most common initial finding is a small reddish papule that progresses to serpiginous pruritic tracts</td>
<td>Urticarial pruriginous eruption, serpiginous but often of haphazard pattern, that rapidly spreads to thighs, back or trunk</td>
</tr>
<tr>
<td>The duration of the lesions varies, but the disease is self-limited and usually lesions will resolve without treatment within 4–8 weeks.</td>
<td>Episodes usually last several hours before disappearing for weeks or months. Because of autoinfection, recurrent larva currans may continue for many years, often decades.</td>
</tr>
<tr>
<td>No systemic manifestations. Eosinophilia and elevated IgE level are rare.</td>
<td>The acute phase symptoms include gastrointestinal symptoms, cough, wheezing and low-grade fever. Chronic phase is usually asymptomatic except for mild abdominal discomfort. High-grade eosinophilia along with elevated IgE level is often present.</td>
</tr>
<tr>
<td>Diagnosis is made clinically based on the history of recent travel to endemic areas in combination with a classic serpiginous rash. A biopsy is not sensitive.</td>
<td>Stool culture in specialized reference laboratories and standard O&amp;P microscopy may reveal the presence of noninfectious rhabditiform larvae, but their utility is limited in chronic phase. Serology testing to detect antibodies to <em>Strongyloides</em> larvae (ELISA) is the most useful tool to confirm the diagnosis.</td>
</tr>
<tr>
<td>Anthelmintics such as thiabendazole, albendazole, mebendazole and ivermectin are used. Topical thiabendazole is considered the treatment of choice for early, localized lesions. Oral treatment is given when the cutaneous larva migrans is widespread or topical treatment has failed.</td>
<td>Ivermectin at a single dose of 200-400 μg/kg is the drug of choice for uncomplicated strongyloidiasis. This drug only kills the adult worms and not larvae, so repeat dosing is necessary to eradicate the infection. Albendazole and thiabendazole are also effective.</td>
</tr>
</tbody>
</table>
Abstract N°: 5416

Adult-onset Hand-Foot-Mouth Disease (HFMD) masquerading as a polymorphic eruption featuring an impetigo-like erosive facial eruption and acral purpura: a rare but distinctive presentation of a common disease

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Introduction & Objectives:

A 20-year-old male military personal was admitted for 5-day duration of progressive painful rashes affecting his face and distal extremities. He was otherwise well, with no associated fever or mucosal lesions. Systemic review was unremarkable. There were no recent sick contacts, and he denied any sexual activity over the past year.

Clinical examination revealed multiple discrete eroded papules with impetigo-like honey-coloured crusting over his face. In addition, there was an acral purpuric eruption characterized by tender purpuric macules and papules of varying sizes on both his hands and feet. There were no oral aphthae.

Materials & Methods:

Not applicable

Results:

A skin biopsy from a representative acral purpuric macule revealed non-specific histological features of a mixed dermal inflammatory infiltrate of lymphocytes and neutrophils. There were no viral cytopathic changes, and leukocytoclasis was absent. Direct immunofluorescence was negative.

Significantly, enterovirus was detected via polymerase chain reaction (PCR) sequencing from both patient’s stool and respiratory (throat) samples. Aerobic culture from a crusted facial papule was negative, and further investigations to exclude other infective etiologies such as herpes virus, disseminated varicella, syphilis and human immunodeficiency virus were unremarkable.

This patient was diagnosed with adult onset HFMD and was treated supportively with analgesia and topical antimicrobials. He remained clinically well throughout admission and was desisolated and discharged after his cutaneous lesions resolved in a week.

Conclusion:

HFMD is a common self-limiting febrile illness of childhood and infancy with a characteristic palmoplantar vesicular eruption and oral mucosal ulceration. Adults are less frequently affected, with an older age of onset being associated with a diverse range of cutaneous manifestations including eczema coxsackium, purpuric, vesicobullous and Gianotti-Crosti-like eruptions.

We describe a distinctive polymorphous eruption featuring impetigo-like erosive facial rashes with concomitant acral purpura as the sole manifestation of adult onset HFMD disease. Coupled with this peculiar observation was the paucity of typical HFMD features like fever and oral aphthae, which further contributed to the initial diagnostic dilemma in this patient.
This case highlights the potential for atypical presentation that may be encountered with HMFD, especially in the non-paediatric population. It underscores the importance of having a high index of suspicion for this disease, and physicians should be cognisant of its diverse manifestations. Recognition of this distinctive presentation should prompt physicians to screen for HFMD, thus enabling the crucial detection of asymptomatic/pauci-symptomatic patients who require expedient isolation, testing and screening of contact cases.
Abstract N°: 5472

Cutaneous leishmaniasis in Croatia: a case report of an 11-year-old patient and review of treatment

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Introduction & Objectives:

Materials & Methods:

Results:

The term leishmaniasis refers to a vector-borne intracellular parasitic infection caused by protozoal Leishmania species. There are three major disease forms: visceral (VL), cutaneous (CL), and mucocutaneous (ML). CL is the most common form. Approximately 95% of cases occur in the Middle East, the Mediterranean, Central Asia, Central and South America. It is estimated that only 25% of new cases are reported to the WHO. Croatia is a hypoendemic region with approximately one case per year.

The disease usually presents as a long-lasting asymptomatic erythematous papule frequently ulcerated, located on the uncovered skin, usually on the face. Clinical manifestations can be complicated or uncomplicated. Small-sized, single lesions in immunocompetent hosts and no mucosal involvement are features of uncomplicated CL. Complicated CL can present with more than four lesions with significant size, subcutaneous nodules, and involvement of hard-to-treat areas.

An 11-year-old male patient who is a Dalmatian region resident, presented with an asymptomatic 15mm ulcer and crust on his left cheek, that had lasted for two months. His laboratory exams showed moderately elevated C-reactive protein. Medical history was otherwise unremarkable. We took a swab of the lesion and polymerase chain reaction (PCR) was positive for Leishmania. Cryotherapy with liquid nitrogen was performed as the lesion was single and small-sized, but there was no clinical improvement. Intra-lesional administration of pentavalent antimony was planned but it was not available in Croatia at the time so the patient had to wait for two weeks for the medication to arrive. After 10 days he came back to the hospital with clinical progression of the lesion to 40mm and regional lymphadenopathy. Liposomal amphotericin B was administered intravenously on the same day but the patient developed erythema of the skin and angioedema. After four days, treatment with intralesional pentamant antimony meglumine antimoniate was started. It was administrated in five sessions every five days. One month after the start of the therapy ulcer was 10mm wide with almost complete epithelisation.

Treatment of CL is challenging because the clinical presentation, treatment regimes, and response to therapy are all highly variable. Only a few well-controlled comparative trials with standardized outcome measures have been performed. Local therapy is suggested for the treatment of uncomplicated CL such as cryotherapy or thermotherapy. For ulcerative lesions, topical paromomycin cream can be used. Systemic treatment is suggested for complicated CL. Azoles and miltefosine are the most commonly used oral systemic agents, and parenteral agents include pentavalent antimonials, amphotericin, and pentamidine.

In the case of our patient, we tried several therapeutic options until remission was achieved. There is a need for more clinical studies and review articles to give physicians better guidelines for treatment regimes.

Conclusion:
Introduction & Objectives:

Human scabies is a parasitic infection caused by a mite Sarcoptes scabiei variety homini. The diagnosis should be considered in the presence of any diffuse pruritus, predominantly nocturnal, sparing the face. The cutaneous lesions are most often not very specific but certain topographies should alert (interdigital spaces, anterior face of the wrists, elbows, umbilicus, buttocks, thighs, external genitalia, nipples).

The diagnosis of certainty is classically based on the demonstration of Sarcoptes scabiei under the microscope after scraping the skin at the level of a scabious furrow.

However, the inaccessibility and the cost make this examination difficult and dermoscopy thus constitutes an alternative of choice, allowing a non-invasive, faster and more precise diagnosis.

This case shows the interest of the dermoscope in the diagnosis of scabies by the demonstration of sarcobte at the level of the hyponychium which must be systematically examined.

Materials & Methods:

This is a clinical case whose diagnosis was based on clinical and dermoscopic analysis using a Dermoscopy Dermlite 4.

Results:

A 22-year-old man living in a community was referred for consultation for a generalized pruritic rash evolving for 3 months with nocturnal recrudescence and pruritus in his companions. He was treated twice with benzyl benzoate as part of the treatment of scabies in the community without any improvement.

On dermatological examination, there were multiple excoriated papules with scratch marks on the trunk, upper and lower limbs and the genital area sparing the face with long uncut fingernails. On the wrists, there were excoriations with linear scaly lesions on the palms of the hands.

Based on these anamnestic and clinical data, the diagnosis of scabies was highly suspect.

A dermoscopic examination of the palm and the hyponychium found many scabious burrows and noodles and Delta glider signs. The diagnosis of profuse scabies was retained. Serologies for sexually transmitted diseases were negative.

The patient and his entourage were put on 10% benzyl benzoate on Day (D) 1, D2 and D7 associated with other hygiene measures including nail clipping with good clinical-dermoscopic control and disappearance of pruritus in our patient.

Conclusion:

Scabies is still a public health problem. The dermoscope makes it possible to affirm the diagnosis in front of the
other anamnestic and clinical orienting elements.

The absence of healing at the beginning despite the classic treatment of scabies in our patient is due to the persistence of the parasite at the level of the hyponychium highlighted by the dermoscope.
Abstract N°: 5522

Corymbiform syphilis: an unusual form of presentation.

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Introduction:

Syphilis is a bacterial infection whose etiologic agent is Treponema pallidum, mainly sexual transmission, with increasing infection rates in recent years, being considered a worldwide public health problem. It has well-defined clinical phases, and if left untreated, it can evolve with neurological and cardiac sequelae. In the secondary phase of the disease, there are several clinical presentation, which can thus simulate other clinical conditions, which is why it is called “the great imitator”. We will report the case with clinical presentation of secondary syphilis was in the corymbiform form, which is considered rare and with few data in the literature on this subject.

Observations:

Male, 33-year-old, with one plaque in the right shoulder, which started three months ago, evolving with central ulceration, well-defined borders and clean bottom, associated with several non-follicular papules around the main lesion. Initial diagnosis was leishmaniasis, and serology for HIV, viral hepatites, HTLV 1/2 was negative but positive for treponemal (VDRL 1:128). An incisional biopsy was performed with lymphoplasmacytic inflammatory infiltrate in the reticular and perianexial dermis (fig.1), in addition to immunohistochemistry showing a large number of spirochetes in the dermo-epidermal junction, around the vessels and nerve filaments (Fig.2), with a diagnosis compatible with secondary syphilis. Treatment with benzathine penicillin was made, with complete remission after three weeks.

Conclusion:

Syphilis is a curable disease, unique to humans, and does not generate an immune response against the agent, may occur reinfections. The transmission is possible through penetration of spirochetes directly into mucous membranes or skin abrasions. The clinical course is subdivided into primary, secondary, recent latent, and late and tertiary forms.

Atypical cutaneous lesions may be present in the secondary forms, such as a corymbiform pattern, which is extremely rare. There are few data in the literature, especially in patients without HIV-syphilis co-infection. As in other forms of secondary disease, lesions at this form of presentation can be disseminated and associated with lymphadenopathy and fever. The corymbiform form has been described as a sign of reinfection or syphilis recurrence.

Diagnosis is based on clinical analysis and serological tests. Although the histological findings are variable, the presence of psoriasiform and lichenoid dermatitis associated a mixed inflammatory infiltrate with the presence of plasma cells is a pattern commonly seen in secondary syphilis. Corymbiform pattern showed lymphocyte aggregates with few epithelioid cells and many plasmocytes in the upper dermis, with the presence of treponema in the reticular dermis, evidenced by immunohistochemistry. These changes are compatible with those observed in the case report above.

We decided to report this case, since the patient had a clinical lesion compatible with the corymbiform form of
secondary syphilis, and even though there was no predominance of spirochetes in the epidermis, other findings were evidenced and consistent with secondary syphilis. The approach to this topic becomes necessary, as in addition to its rare clinical presentation, syphilis remains a global public health problem with a growing number of cases in recent years, being a risk factor for other sexually transmitted infections.

Figure 1

Figure 2
Abstract N°: 5551

**Atypical leprosy case and bilateral blindness**

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**Atypical leprosy case and bilateral blindness**

**Introduction & Objectives:**

Leprosy is an infectious disease with a neurocutaneous tropism caused by *Mycobacterium leprae*. The global prevalence of leprosy is 16.6 per million population worldwide and 13.3 per million population in Africa. Clinical manifestations are highly variable depending on individuals immune status. Tuberculoid form usually presents with a limited number of well-demarcated erythematous lesions. Lepromatous forms are characterized by multiple nodular infiltrates or lepromas. Leprosy has the highest incidence of ocular involvement of all human bacterial infections, including cecity. We report a leprosy case revealed by bilateral blindness after neglected atypical cutaneous symptoms.

**Materials & Methods**

Case report

**Results:**

A 43-year-old man was referred to Dermatology department for a facial skin lesion that had been evolving for several years. On examination, he presented with annular lesions, with verrucous infiltrated borders and a depressed scarring centre, located under the right eyelid and on the chin. Lesions were painless, non-pruritic and normoesthetic. There were no systemic associated symptoms, nor other skin lesions detected.

In his history, he reported 10 years ago a sudden decrease of vision of the right eye, without pain nor ocular redness. For the past year, progressive blurring of the left eye resulted in total loss of vision. Ophthalmological examination found no light perception, and ocular perforation of possible infectious cause of the right eye and a panuveitis of the left eye at the slit lamp.

The most suspected diagnosis were sarcoidosis, chromoblastomycosis, granuloma annulare and leprosy. Anatomopathological examination of the cutaneous lesion showed an epithelioid granuloma with a few Langhans-type giant cells, without caseous necrosis, and a lymphocytic cell infiltrate. Mycobacterial screening was negative, a skin smear test was positive at 2+, and the PCR for leprosy was positive. The diagnosis of borderline tuberculoid leprosy associated with infectious panuveitis was retained. Anti-leprosy multidrug therapy was started.

**Conclusion**

Atypical presentations of leprosy remains a diagnostic challenge even in endemic country. Among them, several unusual forms have been reported namely granuloma annulare-like, erythema multiforme, centrifugal erythema annulare, psoriasiform plaques, hypertrophic scars, annular vesiculobullous lesion, verrucous plaques such as ours.
In such cases, diagnosis can be made with histopathological and biomolecular screenings.

Among the ocular manifestation, blindness affects 5% of leprosy patients. It can be bilateral and asymmetric. It is rarer in the paucibacillary forms. Leprosy-related blindness is due to anterior and/or posterior uveitis, keratitis which is a consequence of lagophthalmos. The severity of the ocular manifestation overshadowed the atypical skin lesions resulting in delay of diagnosis.

Keywords: Annular lesion, Blindness, Borderline tuberculoid, Leprosy, Verrucous lesion.
Abstract N°: 5553

Subsequent mycoses in an immune compromised patient: Colletotrichum gloeosporioides-hyalohyphomycosis and Exophiala oligosperma-phaeohyphomycosis

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Introduction & Objectives:

Hialo and phaeohyphomycosis are groups of mycoses caused by several agents and have different clinical manifestations.

The genus Colletotrichum usually causes infections in plants and rarely in humans. It is related to inoculating organic or woody material into the eye or cutaneous surfaces, causing hyalohyphomycosis. The genus Exophiala is one of the causes of phaeohyphomycosis. One of the common manifestations of dematiaceous fungi is superficial localized cutaneous and subcutaneous disease. Lesions typically appear as isolated cystic or papular lesions on exposed areas of the body.

We report the case of an immunocompromised man with subsequent hyalohyphal mycoses and phaeohyphomycosis, both with good responses to the treatments.

Materials & Methods:

Review of the medical record of a patient treated at a tertiary care University hospital.

Results:

A 63-year-old man who worked in farming, from the interior of the state, in a rural area, immunosuppressed by a kidney transplant since 2014, who 3 years ago had a tumor, with a lobulated surface, with fistulous ostia with drainage of serosanguineous material, with no grain output on the dorsum of the left foot at 5 months, with progressive growth. The patient was using prednisone and azathioprine at the time.

The anatomopathological (AP) examination revealed chronic granulomatous dermatitis with atypical fungal structures. The investigation of the secretion culture revealed sequencing similar to Colletotrichum gloeosporioides diagnosed a mycetoma-like hyalohyphomycosis, since grains were not observed.
The patient was treated with intravenous voriconazole 200 mg for 14 days and then maintained with itraconazole 400 mg/day for 2 months, with complete regression of the lesion, after which the patient was maintained with itraconazole 200 mg/day. After one year, the patient developed a nodular lesion, nonadherent, on the right upper limb, which evolved in 1 year, growing to 1.5 cm in diameter.

Direct microscopy showed fungal structures with atypical morphology, suggestive of medullary bodies. Surgical excision of the lesion was performed, with an AP examination showing chronic granulomatous dermatitis with microabscesses and exuberant epidemic hyperplasia. Culture and mycological genetic sequencing showed *Exophiala oligosperma*, sensitive to itraconazole.

Despite the finding in the direct examination and in the AP examination of muriform cells, our group by the clinic diagnoses a phaeohyphomycosis infection, treated with a double dose of itraconazole. It presented a good clinical response, with no recurrence of lesions on the right foot and forearm after completing 3 months of treatment. After 6 months of itraconazole 200 mg, this treatment was discontinued without relapses until now.

**Conclusion:**

We report a case of an immunocompromised patient who presented with rare manifestations of opportunistic mycoses: mycetoma-like hyalohyphomycosis on the foot caused by *Colletotrichum gloeosporioides* followed later by cutaneous phaeohyphomycosis on the forearm caused by *Exophiala oligosperma*.

In addition to the rarity of the case, the lesion on the forearm shows that the finding of muriform cells in the direct examination or in the AP examination of the skin is not pathognomonic of chromoblastomycosis, as interpreted by several authors, since the clinic, the causative species, the treatment and the evolution of the patient’s forearm lesion rule out the diagnosis of chromoblastomycosis. **
**Abstract N°: 5562**

**Dermatophytids secondary to tinea capitis: about 5 cases**

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**Introduction & Objectives:**

Dermatophytid or auto-eczematization reactions correspond to inflammatory skin reactions secondary to a distant dermatophyte infection. Dermatophytids secondary to tinea capitis are rare and underdiagnosed.

**Materials & Methods:**

This is a retrospective study from January 2014 until April 2023, having included 5 cases of dermatophytids confirmed and followed up at our dermatology outpatient clinic.

**Results:**

The patients were between 4 and 14 years old. The diagnosis of tinea capitis was retained in all patients by mycological culture. Tinea capitis was secondary to trichophyton tonsurans (case 1), microsporum canis (case 2 and 5), trichophyton mentagrophytes (case 3), trichophyton verrucosum (case 4). Two of them had kerion (case 3 and 5). The time of appearance of dermatophytids was few days after the initiation of systemic antifungal treatment with griseofulvin in four cases and two weeks in one case (case4). The Id reactions observed were generalized exanthematous and pustular dermatophytid type (case 1), vesiculo-pustular lesions of the face and neck in two cases (2 and 5), and erythema nodosum in two cases (3 and 4). Bacteriological and mycological samples from id reactions were sterile in all cases. Griseofulvin was maintained in all cases, combined with short systemic corticosteroid (0.5 mg/kg/d) in the case of generalized exanthematous and pustular dermatophytid. High potency topical corticosteroids were prescribed in the other four cases.

**Conclusion:**

Dermatophytids occur in 4-5% of patients with dermatophytosis. It is commonly seen in patients with tinea pedis. Dermatophytids correspond to aseptic cutaneous inflammatory reactions secondary to a distant dermatophyte infection, they occur in the acute phase of the infection, or on average 13 days after the introduction of the antifungal treatment in the different series of the literature. These are phases where the release of dermatophytic antigens is maximal. Inflammatory tinea capitis, which represent 6.4% of tinea capitis, seem to promote the occurrence of dermatophytids. The intensity of the host’s immunological reaction responsible for the occurrence of a dermatophytid, would be proportional to the degree of inflammation of the tinea capitis. The diagnosis of dermatophytid is established based on the combination of three criteria, the presence of dermatophytosis documented by a mycological culture at the initial site of the infection, the absence of dermatophyte in the skin lesions located at a distance of the initial lesion and resolution of all symptoms after initiation or maintenance of antifungal treatment. Secondary id reactions to tinea capitis are most often characterized by diffuse pruritic papules localized preferentially on the trunk, face and around the ears, and less frequently on the limbs. Our series is particular by the presence of clinical forms rarely described such as generalized exanthematous and pustular dermatophytid and reactions such as erythema nodosum. The treatment is based on the continuation of the antifungal treatment in combination with local or even systemic corticosteroid therapy in severe cases.
Abstract N°: 5565

Recurrent bacterial superinfection in the setting of monkeypox virus infection

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Introduction & Objectives:

Introduction: The presence of suppurative lesions in the inguinogenital-anal region admits a wide differential diagnosis. The incidence of secondary cutaneous infections of bacterial origin is increased in patients with sexually transmitted infections (STI), and both diagnoses may overlap in clinical practice.

Results:

Case report: A 35-year-old male with a painful left inguinal mass was admitted in the emergency room. He had previously presented fever, generalized vesicular-pustular lesions and proctitis. Due to the initial suspicion of lymphogranuloma venereum (LGV) and Monkeypox virus co-infection, empirical antibiotherapy with ceftriaxone and doxycycline was started. In the microbiological study by PCR, MPXV was identified and in the cultures performed by aspiration of the mass, Streptococcus pyogenes was isolated. The rest of the study was negative for Chlamydia trachomatis serovar L1-L3 and Haemophilus ducreyi. Serology ruled out HIV. CT study showed a soft tissue mass with small surrounding lymph nodes of reactive appearance. Clindamycin was added with complete healing in the following 4 weeks. In the following 6 weeks, the patient was admitted again for a febrile syndrome accompanied by cellulitis in the left buttock and hip. A new CT scan was performed, which ruled out the presence of underlying fistulas or abscesses. Staphylococcus aureus was not detected in nasal/anogenital swabs. He received treatment with amoxicillin-clavulanic acid with complete resolution, with no subsequent recurrences.

Conclusion:

Monkeypox is a zoonosis caused by MPXV infection, clinically characterized by the development of cutaneous-mucosal vesicular-pustular lesions. Cutaneous infections of bacterial origin are more frequent in patients with ulcerative STIs or multiple and frequent sexual contacts. Disruption of the epithelial barrier in MPXV lesions may favor bacterial superinfection of the skin and soft tissues, causing atypical manifestations as in the case presented.
Abstract N°: 5619

Post-COVID primary cutaneous mucormycosis

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Introduction & Objectives:

Primary cutaneous mucormycosis is an uncommon infection caused by saprophytic fungi, occurring most often in diabetics and immunocompromised patients. The primary cutaneous form has better prognosis than the more deeply invasive form, but can have catastrophic consequences for the patient. We report here a case of primary cutaneous mucormycosis in a diabetic, COVID-19 positive patient.

Materials & Methods:

A 43-year-old male admitted to our hospital in COVID ward with fever and breathlessness for past 2 days. He was a known hypertensive since 4 years and newly diagnosed diabetic, started on injection Enoxaparin subcutaneous, 60mg prophylactically. Seven days later he developed a painful necrotic plaque on left forearm on one of the injection sites. Provisional differential diagnoses of Enoxaparin-induced skin necrosis and primary cutaneous mucormycosis was made and biopsy was sent for confirmation. Histopathological examination showed necrotic epidermis and dermis and PAS stain showed fungal hyphae consistent with Mucor. A swab for KOH mount and fungal culture was sent and cutaneous mucormycosis confirmed.

Results:

He was started on injection Amphotericin-B for 21 days. Surgical debridement and dressings were done and the wound secondarily closed after 2 months, once fungal cultures came negative.

Conclusion:

Cutaneous mucormycosis is a dreaded complication of the immunosuppressed state, which has become all the more important in the COVID era. It leads to significant morbidity and mortality with some studies reporting a mortality ranging from 4% (localized form) to as high as 94% (in disseminated disease). A high index of suspicion is required due to varied clinical presentations like bullous lesions, necrotic ulcers, zosteriform lesions or erythema-multiforme like lesions. Rapid diagnosis and initiation of effective antifungal therapy is necessary to ensure a favourable prognosis.
Abstract N°: 5629

**Varicella-Zoster Virus: A Cause of Eczema Herpeticum?**

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**Introduction & Objectives:**

Eczema herpeticum (or Kaposi’s varicelliform eruption) is considered a severe and extensive cutaneous form of herpes virus infection, typically developing in children with atopic dermatitis (AD), particularly if undergoing treatment with immunosuppressive agents. This clinical entity is classically associated with Herpes-Simplex type 1 infection, but similar findings in patients with Coxsackie A6 and A16 infection have originated the term eczema coxsackium, considered a more severe and disseminated form of hand-foot-mouth disease. The possibility of other viral infections presenting with similar clinical pictures in patients with AD is plausible. We report a case of severe chickenpox resembling eczema herpeticum.

**Materials & Methods:**

Results:

** A two-year-old boy with a past history of severe and poorly controlled AD presented to the Emergency Department with a disseminated vesicular rash and fever. On examination, the patient showed an erythematous rash covering almost the entire body surface area, with the exception of palms and soles, with confluent vesicles on the proximal limbs and multiple hemorrhagic crusts on the face (including the lips) and trunk, with some impetiginized lesions on the perioral region and the neck. There was marked facial and palpebral edema, as well as high fever (auricular temperature of 40º Celsius) on admission. The symptoms had started five days earlier, with fever and progressive appearance of discrete vesicles on the face and trunk, and the epidemiological history was relevant for an older brother diagnosed with chickenpox the previous week. The patient was admitted to a Pediatric Intermediate Care Unit and initiated treatment with intravenous acyclovir, flucloxacillin and clindamycin. Viral serologies were compatible with an acute varicella-zoster virus (VZV) infection and the detection of viral DNA by Polymerase Chain Reaction (PCR) on the cutaneous lesions was positive. Serologies and PCR for Herpes Simplex were both negative.

Conclusion:

This case represents an atypical and extremely severe form of chickenpox, with a clinical presentation compatible with eczema herpeticum. The extension of the rash and the presence of important facial edema in an ill-appearing child are uncommon and possibly attributable to pre-existing AD. This case highlights the need for a closer follow-up of chickenpox cases among the population with comorbid AD. There are few cases of this severity reported in the literature, at least in immunocompetent children, and their incidence is difficult to estimate. The report of this type of cases may aid in recognizing their true incidence and assessing the possible benefit of vaccination in this population, as the varicella vaccine is not universally recommended in all countries.
Malignant varicella associated to Thoracic herpes zoster in immuno-compromised patient

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Introduction & Objectives:

Varicella is a common, contagious, usually mild infection caused by the varicella-zoster virus that occurs mostly in infancy and is often considered mild in healthy children, however, in adults it is rare, severe, and often associated with a high mortality rate. Herpes zoster (HZ) is the result of reactivation of latent varicella zoster virus (VZV) and occurs most frequently in older adults.

We report the observation of a young adult patient immunocompromised, without history of varicella during infancy who developed both Varicella and Herpes zoster in the same time.

Materials & Methods:

22 year old male patient, with a history of segmental and focal hyalinosis under oral corticotherapy and Mycophenolate mofetil without history of Varicella during childhood, admitted for an extensive vesicular rash evolving for one week.

Dermatological examination found facial swelling associated with an oedema of the 2 eyelids more accentuated on the left eye, umbilicated vesiculo pustular lesions spread on the scalp, face, trunk and 4 limbs, crusty and impetiginated lesions on the face, Ulcerated belt-shaped vesicular exanthema in the left hemi thorax, petechial purpura on the trunk and oral enanthemata, upon questioning the patient, it was discovered that the vesicular rash manifested three days prior to the development of belt-shaped vesicular exanthema. The rest of clinical examination found snoring rales.

Biological workup showed lymphopenia, thrombopenia, hepatic cytolysis (X10 N), hypo albuminemia at 17, elevated elevated C-reactive protein at 300 and Procalcitonin at 10 ng/ml, renal failure with creatinin at 35 and urea at 1.40.

Chest X-ray and thoracic CT showed a varicella-like pneumopathy, cerebral MRI showed a slight subcortical atrophy, lumbar puncture was normal as well as electroencephalogram.

After concertation with neurologists, pneumologists, infectious diseases specialists and nephrologists, the diagnosis of malignant varicella associated to thoracic herpes zoster complicated with varicella pneumonia and sepsis was retained. Immunosuppressive treatments were suspended and the patient was put on triaxon 2g per day, aciclovir 10mg/Kg/8h, albumin infusion and analgesic treatment as well as LED sessions for pain.

The evolution was good, skin lesions have regressed and hepatic and infectious work up have normalized.

Conclusion:

The particularity of our observation is the occurrence of malignant varicella and Thoracic herpes zoster in an immunocompromised patient.

Both varicella and herpes zoster are caused by the Varicella Zoster Virus (VRV), varicella is the primary infection
and herpes zoster is a reactivation of the varicella-zoster virus that usually occurs in adulthood. In some cases, individuals can experience both varicella and herpes zoster simultaneously or in close succession, like was the case of our patient, this occurrence is relatively rare but has been reported in some case reports.

It is believed that the occurrence of both varicella and herpes zoster seems to be associated with a compromised or weakened immune system, which allows the varicella-zoster virus to reactivate and cause both conditions.
Abstract N°: 5657

Rare case of Eczema herpeticum in patient with pemphigus foliaceus

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Introduction & Objectives: Eczema herpeticum (EH) is an acute disseminated herpes simplex virus skin infection that is mostly developed in patients with atopic dermatitis, but can also occur in the setting of other preexisting skin diseases with impaired skin barrier, i.e. Darier’s disease, Sezary syndrome, and pemphigus vulgaris. Although the clinical presentation of EH is characteristic, this rare condition is quite prone to being confused with flares of underlying dermatosis, or bacterial superinfection, resulting in delay in treatment with systemic antiviral drugs.

Materials & Methods: We present a case of a 59-year old Caucasian male who presented with one-month-history of blisters and painful erosions on the face and trunk. Histopathological examination of the edge of the blister revealed subcorneal cleft filled with eosinophils and neutrophils, as well as mixed dermal infiltrate of lymphocytes and neutrophils. Direct immunofluorescence test revealed intraepidermal reticular deposits of IgG and C3c, predominantly localized in upper parts of epidermis. Indirect immunofluorescence was positive, with titer 1:80. ELISA test showed high titer of autoantibodies against desmoglein 1 and low titer of desmoglein 3 autoantibodies. Based on clinical presentation and diagnostic procedures, diagnosis of pemphigus foliaceus was established.

Results: Patient was treated with dexamethasone pulse therapy and azathioprine. Initially, there was significant clinical improvement. In the next days, numerous new vesicles leaving “punched-out” erosions started to appear over preexisting skin lesions. Clinical appearance was suggestive of herpes viral infection. No systemic symptoms and lymphadenopathy were observed. Tzanck smear taken from the base of the fresh vesicle revealed numerous multinucleated giant cells. Diagnosis of EH arising on pemphigus foliaceus was established. Treatment with orally administered acyclovir in dosage of 5x400mg daily for 10 days led to complete epithelization of erosions.

Conclusion: EH is considered medical emergency and potentially life-threatening condition. Although EH most commonly occurs in patients with atopic dermatitis, it needs to be taken into consideration in cases of other skin conditions with damaged skin barrier, as such make susceptible conditions for cutaneous dissemination of herpes simplex virus as well. Individuals on immunosuppressive therapy are more prone to developing infections. Early diagnosis and appropriate antiviral treatment are necessary to prevent systemic complications and possible lethal outcome.

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Abstract N°: 5658

Epidemio-mycological trends in recalcitrant dermatophytosis: a study from western India

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Introduction & Objectives:

Cutaneous dermatophyte infections are one of the most common superficial mycoses worldwide. In recent years, India has seen a surge in recalcitrant dermatophyte infections, that present with varied morphology, persisting for months despite adequate anti-fungal therapy. This study aimed to identify recent epidemiological trends of recalcitrant dermatophytosis in patients presenting to outpatient department of Dermatology, and to determine their antifungal susceptibility patterns.

Materials & Methods:

Patients presenting to outpatient department with suspected dermatophytosis were screened and those with recalcitrant disease were enrolled in the study. A detailed history, clinical examination and skin scrapings collection for mycological analysis was done. In-vitro antifungal sensitivity testing to Itraconazole and Terbinafine was carried out on species isolated from culture as per Clinical and Laboratory Standards Institute M38A2 protocol using broth microdilution method.

Results:

There were 100 patients in the study, with 59% males. Highest prevalence was seen in 21–30 age group (37%), in month of July (28%). 78% cases had disease duration < 6 months and 45% were involved in manual work. Tinea corporis was the most common presentation (53%). Topical steroid application was observed in 57% patients, 60% reported recurrence of lesions. Direct microscopy of KOH wet-mount was positive in 47% while fungal culture in 60%. T. mentagrophytes (48%) was the most common pathogen isolated. Minimum inhibitory concentration of Terbinafine ranged from 0.05- 32 µg/ml and Itraconazole from 0.06-16 µg/ml. In-vitro resistance to Terbinafine was reported in 44% of tested isolates and in 12% to Itraconazole.

Conclusion:

Epidemiological trends supplemented with antifungal susceptibility testing data will go a long way in objectively evaluating our understanding of this newly emerged menace of recalcitrant dermatophytosis.
Atypical unilateral presentation of neutrophilic dermatosis of the hands following insect bite

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Introduction & Objectives:
Neutrophilic dermatosis of the hands (NDH) is a rare, under recognized entity, which is now considered as “an uncommon localized variant of sweet syndrome”. Clinically, the lesions are characterized by tender reddish plaques, pustules, nodules and haemorrhagic bullae, that may lead to ulcerations. It usually affects the dorsal surfaces of both hands. Herein, we report an atypical presentation of unilateral NDH following insect bite.

Case presentation:
A 65-year-old man presented to our outpatient department with painful lesion over the dorsum of his right hand of one-week duration following an insect bite, treated with antibiotics prescribed by his general practitioner without any response. The patient did not present fever nor other acute symptoms. Dermatological examination revealed tender erythematous-violaceous plaque with central bullae and an undermined purplish border, and a satellite tender reddish papule localized only on the dorsal surface of his right hand. A swab culture from the lesion did not identify pathogenic microorganisms. Histopathological examination of skin biopsy showed a dense neutrophilic infiltrate in the dermis with leukocytoclastic vasculitis and fibrinoid necrosis, epidermal spongiosis and acanthosis. No organisms were identified on haematoxylin and eosin (H&E) or special stains. The diagnosis of NDH was made. Routine blood tests, tumor markers and serum blood electrophoresis were within normal limits. The patient received high-level-topical steroids (betamethasone ointment) with complete healing of lesions after one month. During regular follow-ups of 3 months, he did not have any recurrence.

Discussion:
NDH was first described by Strutton et al in 6 women with lesions clinically resembling Sweet’s syndrome, but localized in the dorsum of the hands and showing a leukocytoclastic vasculitis. This condition was termed “pustular vasculitis of the dorsum of the hands”. In 2000, Galaria et al. described 3 clinically and histologically similar cases without systemic symptoms and lacking a true vasculitis, leading the authors to rename the entity “neutrophilic dermatosis of the dorsal hands”. A recent review of the literature reported 123 cases of NDH in which vasculitis was reported in 36 cases (29.5%). It is likely that the vasculitis is usually only identified in early lesions and this phenomenon most likely represents a reaction to the intensity of the neutrophilic infiltration and the endothelial damage and thus, is dependent on the timing of biopsy. Misdiagnosis of NDH is common, and differential diagnosis often includes acute bacterial infections which often lead to antibiotic therapy and unnecessary aggressive management strategies, fixed drug eruption and the other neutrophilic dermatoses. NDH can be associated with multiple diseases, mainly hematologic malignancies. Other associations include solid neoplasms, inflammatory bowel disease and drugs. To the best of our knowledge, this is the second case describing a unilateral NDH following insect bite. In our case, lesions were present unilaterally over the dorsum of the right hand, without any systemic association and occurred at the site of insect bite, which suggests the cutaneous pathergy associated with the dermatosis.

Conclusion:
Finally, through this case, we highlight the importance of recognizing this rare entity. Early diagnosis and thorough systematic investigations are necessary in order to better manage these patients.
Abstract N°: 5744

Reye syndrome after administration of acetylsalicylic acid during varicella

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Introduction & Objectives:

Reye syndrome is a severe and extremely rare disease, appearing typically after administration of acetylsalicylic acid during a viral infection and causing acute encephalopathy and fatty degeneration of the liver. The biochemical explanation for Reye’s symptoms is a disturbance in mitochondrial metabolism, resulting in metabolic failure in the liver and other tissues. We report a case of this entity observed in a child.

Materials & Methods: Case report

An 8-year-old girl, vaccinated according to the National Immunization Program, was admitted for a generalized and pruritic vesicular rash that appears 5 days ago first on her face then spreads over the entire body suggestive of varicella. It was accompanied with fever and persistent vomiting. She had taken acetylsalicylic acid 500mg three times a day. On clinical examination, she was lethargic, her Glasgow score was 13/15, the temperature was 39°C. Laboratory studies revealed an hepatic cytolysis seven times higher than normal and high levels of C-reactive protein. Other blood tests were normal. Cerebral magnetic resonance imaging was normal. The child was hospitalized in emergency and received the necessary resuscitation measures. An antiviral treatment based on acyclovir 20mg/kg/day IV was started immediately. The evolution was favorable with normalization of consciousness and transaminases.

Results:

Reye syndrome is an acute and potentially reversible anatomo-clinical-biological entity, associating non-inflammatory encephalopathy and liver damage. The biological translation of liver degeneration is hepatic cytolysis without cholestasis. Liver histology associates micro vesicular steatosis with mitochondrial ultrastructural alterations. Several pharmacoepidemiological studies in the USA have established a formal link between taking acetylsalicylic acid during a viral infection and Reye syndrome. The diagnosis can be established in its early stage by combining the history of prodroms with persistent vomiting and increased transaminases after excluding meningitis or encephalitis.

Lovejoy initially described 5 clinical stages:

**Stage 0**: Alert stage, history of illness, no clinical manifestation

**Stage 1**: Persistent vomiting, lethargy

**Stage 2**: Agitation, hyperventilation, mydriasis

**Stage 3**: Coma

**Stage 4**: Deep coma

**Stage 5**: Respiratory arrest.

Our child was admitted at stage 1.
The probability of recovery is excellent when Reye syndrome is diagnosed and treated early, before delirium or coma sets in, as it was observed in our case. Children who are not diagnosed early can slip into a coma and die.

**Conclusion:**

Reye’s syndrome is an extremely rare but serious and often fatal condition. The mortality of this disease has decreases due to early diagnosis, recognition of atypical cases and aggressive treatment.
Abstract N°: 5745

The resistant tinea epidemic in Mumbai, India

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Introduction & Objectives: The cases of dermatophytosis have increased over last 10 years, more so in India where it has reached epidemic proportions. This author had presented a poster titled “Resistant tinea epidemic in Mumbai, India” at the EADV Copenhagen conference in 2015. Eight years down the line, the epidemic has become mature. Now we know that there is a shift in epidemiology from Trichophyton rubrum to T. Mentagrophytes & now it is believed to be Trichophyton indotiniae. As these cases do not respond to the usual dose of oral antifungals, Indian dermatologists have been forced to use higher dose and longer duration of oral antifungals with a risk of side effects. The current study looks at the number of cases presenting in a solo dermatology clinic in Mumbai. This data may reflect the case load in the community. The objective of this study is to present the real-world picture of this epidemic.

Materials & Methods: All cases presenting to a solo dermatology practice in Mumbai, India in the months of June to November 2022 were enumerated. The cases of dermatophytosis and total cases of dermatology were compared.

Results: In the months of June, July, August, September, October & November 2022 there were 106, 131, 177, 186, 192 & 201 cases of dermatophytosis while the total number of dermatology outpatients were 325, 393, 474, 503, 462 & 580. Thus, total dermatophytosis cases were 993 & total dermatology cases were 2737. Thus, there was 1 case of dermatophytosis in 2.75 cases visiting the clinic.

Conclusion: This 6-month data showed increasing trend in dermatophytosis cases. These figures are indicative of a similar trend in the community & the city. The trends indicate that the epidemic is far from being under control.
Abstract N°: 5763

**Hypercalcemia associated with disseminated paracoccidiomycosis in an immunocompetent patient: a case report**

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**Introduction & Objectives:**

Paracoccidioidomycosis is an acute to chronic systemic mycosis caused by the fungi *Paracoccidioides spp.* It involves the skin, lymph nodes, liver, lungs, and spleen. Brazil accounts for 80% of the cases worldwide. There are limited reports describing hypercalcemia and acute kidney injury in patients affected by paracoccidioidomycosis. We present a case of a patient with paracoccidioidomycosis who developed hypercalcemia and acute kidney injury (AKI).

**Materials & Methods:**

Records from a patient affected by acute/subacute paracoccidioidomycosis who developed hypercalcemia and AKI were reviewed by clinical staff from Dermatology and Nephrology Department in a tertiary hospital in Brazil.

**Results:**

A 30-year-old immunocompetent man from Brazil was admitted to an emergency department complaining of a 5-month history of papular erythematous and violaceous skin lesions, lymphadenopathy and hepatosplenomegaly. Physical exam revealed erythematous papulonodular lesions with a necrotic center. Skin biopsy and direct mycological exam (DME) showed *Paracoccidioides brasiliensis* fungi (Fig 1 a, b). Initial exams showed increased levels of creatinine (1.43 mg/dL) and total calcium (12.6 mg/dL). Parathyroid hormone (PTH) was suppressed followed by normal-to-low 25(OH) Vitamin D levels. Additional investigation showed normal PTH-rp and high 1,25-vitamin D levels (94ng/dL). The computed tomography scan did not show bone lesions. After 10 days of starting treatment with Amphotericin B deoxycholate, tramadol and pamidronate he presented cutaneous lesions suggestive of a drug reaction. Medication was suspended and methylprednisolone was administered. Amphotericin B was restarted in liposomal formula. After 20 days, creatinine reduced to normal range and calcium levels decreased. Amphotericin B was replaced for trimethoprim-sulfamethoxazole with clinical improvement of the lesions and resolution of hypercalcemia during the 6th-month outpatient follow-up, associated to clinical and serological remission.

**Conclusion:**

Paracoccidiomycosis is considered a granulomatous systemic mycoses disease, in which hypercalcemia has been poorly described. There were found only three cases describing hypercalcemia associated with this disease, and suggested mechanisms are 1,25(OH) 2D production by macrophages from granuloma and calcium release from bone lesions. This report is the first one that shows increased levels of 1,25(OH) 2D associated to
Paracoccidiomycosis and no evidence of bone lesions, suggesting that the mechanism was production of activated D vitamin by the granuloma. We believe this report can help the scientific community to start major studies to define the exact mechanism of hypercalcemia on this disease. This knowledge may improve prompt diagnosis of the kidney affection, avoiding morbidity and mortality caused by hypercalcemia complications and acute kidney injury.

Fig. 1 a) micro-buds (H&E)

b) DME: multiple budding
Abstract N°: 5834

Osteomyelitis of the first metatarsophalangeal joint identified in a diabetic patient with erysipelas: a case report

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Introduction:

Materials & Methods:

Results:

A 58-year-old female Caucasian patient with type 2 diabetes, chronic venous insufficiency and arterial hypertension presented with a two-week history of swelling and redness in her left lower leg which began after the appearance of a “wound” on her left foot. The patient had been prescribed doxycycline orally and fusidic acid topically by another physician, but her condition continued deteriorating and she became febrile.

The clinical examination revealed well-demarcated erythema and edema in the left lower leg. A circular ulcer with a diameter of 3cm, smooth edges and surrounding atrophic skin was present on the left foot, overlying the first metatarsophalangeal joint, oozing blood and pus. A second smaller ulcerated lesion oozing pus was present medially to the first.

The patient was hospitalised in the dermatology ward with a diagnosis of erysipelas and started intravenous antibiotic therapy with co-amoxiclav, as well as topical therapy. After Proteus mirabilis was identified from skin culture, metronidazole was added intravenously. A surgeon was called two times to carry out pus drainage, and a consultation was done with an endocrinologist due to uncontrolled diabetes with adjustment of the therapy. A clinical suspicion was raised relating to the deep ulcerations on the foot and an X-ray was done to rule out bone involvement. The radiographic finding showed vaguely demarcated zones of osteolysis and bone destruction leading to bone obliteration around the head of the first metatarsal bone and the base of the proximal phalanx suggestive of osteomyelitis at the first metatarsophalangeal joint. The patient was referred to a surgeon immediately after dehospitalization for surgical management of the infection.

This case highlights the need for a high level of suspicion in dermatologists; in this patient the osteomyelitis was masked by an overlying erysipelas and the state of the ulcers on the foot could easily have been attributed to a combination of uncontrolled diabetes and peripheral venous disease. Osteomyelitis is an infection that requires urgent intervention to avoid spread of the bone involvement and this patient was lucky to have been diagnosed quickly.

Conclusion:
Abstract N°: 5844

**Extensive Paracoccidioidomycosis in the genital region: A rare report**

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**Introduction & Objectives:**

Paracoccidioidomycosis is a systemic fungal disease caused by dimorphic fungi of the genus Paracoccidioides, including Paracoccidioides brasiliensis complex and Paracoccidioides lutzii. The fungus has a geographic distribution limited to Mexico, Central and South America and approximately 80 percent of cases have been reported in Brazil, being the southeast, midwest and southern areas of the country the largest endemic areas.

This report aims to illustrate an extensive, rare case, with a good response to the treatment used so far.

**Materials & Methods:**

Male, 57 years old, from Curitiba/PR, works with truck, started with painful lesions in the perineal region, extending to the gluteus for 6 months. He reports weight loss of 8 kg, without other systemic symptoms. On physical examination, he had multiple moist ulcerated lesions with black dots in the left perineal region of approximately 7 cm and in the bilateral gluteal region of 3 cm.

He was submitted to anatomopathological examination, which was consistent with Paracoccidioidomycosis. Treatment with Itraconazole 200mg/d was started, with significant improvement of the lesions after 2 months of treatment. The patient remains on the medication, has gained 8 kg in weight and is awaiting investigation for systemic condition with the infectologist.

**Results:**

The clinical presentation of paracoccidioidomycosis depends on different factors, such as pathogen virulence, host immune response and affected organs. In adults, the most common form of the disease is chronic, which mainly affects males over 30 years of age. The multifocal form is the most common chronic form, in which there is dissemination to the lungs, lymph nodes, skin and mucous membranes.

Direct fungal inoculation through the skin is extremely rare, due to the low number of fungal propagules inoculated subcutaneously in trauma. When present, skin lesions are frequent on the face and appear as infiltrated or vegetating plaques. Granular and nodular cutaneous ulcerations, that can become necrotic or result in subcutaneous cold abscesses, may occur. Differential diagnoses include mucocutaneous leishmaniasis, syphilis, Wegener granulomatosis, lymphoma, sporotrichosis and scrofuloderma.

The diagnosis can be made by microscopic visualization of fungal elements suggestive of Paracoccidioides spp or by culturing this fungus from clinical specimen. PCR analysis of tissue or serum targeting can also be used for diagnosis. Skin biopsy shows a suppurative cutaneous granulomatous inflammation and pseudoepitheliomatous hyperplasia. Serologic testing can be useful both for diagnosis and for monitoring the response to therapy.

Treatment includes long-term administration of amphotericin B, systemic triazoles, and sulfonamides. The patients should be monitored until the criteria for cure are met: clinical, radiological and mycological improvement, stabilization of agar gel double immunodiffusion results at 1:2 or negative conversion of two samples within a 6-month interval after the treatment, protein electrophoresis, ESR and mucoproteins showing normal results for 3
consecutive months

**Conclusion:**

Even rare, it is necessary to know about the different presentations of Paracoccidioidomycosis, as it is a disease with possible systemic involvement, with a great impact on the patient’s quality of life and that there is a cure.
Abstract N°: 5847

Epidemiological and clinical aspects of pediatric leprosy in Antananarivo, Madagascar

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Introduction & Objectives: Leprosy or Hanseniasis is a chronic transmissible infectious disease caused by Mycobacterium leprae that affects skin and peripheral nerves. Leprosy is included in Neglected Tropical Diseases and remains endemic in Madagascar. This immunological disease is more common in adult than enfants. This study was conducted to describe the epidemiological, clinical, therapeutic and the outcome aspects of leprosy in children.

Materials & Methods: A descriptive retrospective study over ten-year period from 2012 to 2021 was conducted on children suffering from leprosy at the University Hospital of Joseph Raseta Befelatanana, a reference center of leprosy in Antananarivo, Madagascar. New cases of leprosy in children under 15 years old were included.

Results: Out of the 109 cases of leprosy, 12 cases were identified in children under 15 years old (11%). The median age was 12 years with extremes of 8 and 14 years. Female gender was the most affected (58.33%). Four patients had leprosy contact history. There were 7 multibacillary type cases and 5 paucibacillary type cases. Two cases (16.66%) of leprosy reaction during the 6 months of treatment (erythema nodosum and type 1 reaction) and 4 cases (33.33%) of grade-2 disability were found. Positive bacteriological index was accounted for 41.66% of leprosy cases. Ten patients received multibacillary regimen for 12 months while 2 patients received over 30 months of treatment. The cure rate for multidrug leprosy therapy was 83.33%.

Conclusion: Detection of new cases of leprosy in children is an indicator of continued transmission, active circulation of bacillus and vulnerability of the children. The incidence of pediatric leprosy in this study is lower than the reported in the literature which can reflect the lack of detection of leprosis in Malagasy children since leprosy is often under-diagnosed.
Abstract N°: 5849

Lazarine Leprosy over pre-existing anetodermic plaques presenting with renal system involvement and electrolyte disturbance

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Introduction:

Leprosy is a chronic infectious disease caused by Mycobacterium leprae. In this report, we describe a case of borderline lepromatous (BL) leprosy that initially manifested as anetodermic plaques all over the body and then developed into lazarine leprosy over the same pre-existing plaques with substantial electrolyte imbalances and renal function test abnormalities.

Case Report:

A 39 year old male with no known co-morbidities presented to the outpatient department with several asymptomatic progressive red raised lesions all over his body one year back. Dermatological examination revealed generalised involvement of the body in the form of several polysized well-circumscribed erythematous atrophic plaques with a few areas having an inverted saucer appearance and hypoesthesia to pain, touch, and temperature. Bilaterally ulnar nerves were grade 1 enlarged, non tender. Acid fast staining on a slit skin smear revealed a bacteriological index of 4+. Biopsy from the lesion showed features of Hansen’s disease borderline lepromatous along with anetoderma. The patient was treated as a case of Hansen’s disease BL in type 1 reaction and started on a three drug multidrug therapy (MDT) with oral steroids. He responded favourably to the treatment as evidenced by resolution of the lesions. His compliance was good and he was being followed up.

Three months after starting MDT and one week after tapering oral Prednisolone to 20 mg, the patient experienced abrupt onset spontaneous oozy ulcers across all of the pre-existing anetodermic plaques along with constitutional symptoms. He was drowsy and febrile but normotensive. A dermatological examination revealed non tender ulcers with well-defined erythematous margins, crusting and hyperpigmentation over the pre-existing anetodermic plaques. Multiple pustules and tense bullae were present over bilateral axillary region and upper back. Gram’s and Giemsa stains revealed abundant gram positive cocci in clusters, indicating Staphylococcus aureus. Biochemistry panel revealed elevated urea (86 mg/dl)and creatinine (4.5 mg/dl), hyponatremia (sodium - 121 mEq/L), hyperkalemia (potassium - 5.9 mEq/L) and raised serum procalcitonin 15ng/mL. He was managed with intravenous fluids, antibiotics and an increase in oral Prednisolone to 70 mg. Presently, the patient is responding well in the form of clinical and biochemical resolution.

Discussion:

In contrast to the relatively uncomplicated course of Mycobacterium leprae infection, reactions are acute nerve-destructive inflammatory events. Ulceration occurs in the lepromatous pole as a result of excessive bacilli proliferation in the lesions, but in the non-lepromatous pole, the principal causes include type 1 reaction and in rare cases, lazarine leprosy. Lucio and Alvarado published the first description of lazarine leprosy in 1852. The symptoms of lazarine leprosy are severe, extensive, and ulcerative. The patient may experience significant morbidity and disability from these lesions, which are frequently painful. Lazarine leprosy’s aetiology is unclear, however a number of factors, including impaired local immunity, enhanced bacilli growth, protein deficiency, and bacterial infections including Streptococci and Staphylococci, have been suggested as potential causes.
**Conclusion:**

Early diagnosis is necessary to treat mycobacterial infections and reactional episodes to stop the spread of infection and prevent disabilities associated with Leprosy.
Abstract N°: 5852

Associations of post-acute COVID 19 syndrome with early onset of herpes zoster in young adults

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Introduction & Objectives:

Varicella-zoster virus (VZV) is a neurotropic α-herpesvirus. Primary infection usually results in varicella, after which VZV becomes latent along the neuraxis. As humans undergo a decline in cell-mediated immunity with age, VZV reactivates to herpes zoster (HZ). So, it’s seen more among individuals aged ≥50 years, immunocompromised patients and those on immunosuppressant drugs.

SARS-CoV-2, a new coronavirus strain responsible for COVID-19, emerged as a global pandemic. The immune system and T-cell alterations are proposed as drivers of post-acute COVID syndrome. Alterations among T-cell subsets exhibit different, severity- and time-dependent dynamics, that in severe convalescents result in senescent state of CD4+ and CD8+ T-cells and disturbances in CD4+ Tregs. The identified alterations of lymphocytes suggest that patients with severe disease could be vulnerable to infectious, autoimmune or autoinflammatory processes up to 6 months after infection.

Objectives: To investigate novel changes in mean ages of HZ cases who were positive for covid 19 within 6 months duration.

Materials & Methods:

Using data from 1st February 2022, to 30th April 2023, we conducted a retrospective study to determine the age specific incidence of HZ in cases that were confirmed as covid positive within 6 months of their HZ reactivation.

Results:

A total of 108 adults, 41 females and 67 males with a clinical diagnosis of HZ were included. Participants aged between 21-78 years old. 101 patients had no immunocompromising condition and 7 were diabetics. The age specific incidence of HZ was 13% in cases aged between (20-29) years, 46% aged (30-39), 14% aged (40-49), 12% aged (50-59), 12% aged (60-69) and 3% were over 70 years. Postherpetic neuralgia occurred in 12% of the cases, most of them were 59 years and older.

Conclusion:

Our findings suggest that recently HZ, out of the ordinary, is affecting more of the immunocompetent young adults, whose cell mediated immunity might have been compromised by post-acute covid syndrome.
Abstract N°: 5895

Suspect invasive fungal infection when dealing with atypical skin lesions in immunosuppressed patient

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Introduction & Objectives: Invasive fungal infections are becoming global health threat due to a growing population of immunosuppressed individuals and the rise in antifungal resistance. In many cases skin is one of the most affected organs, either as a site of primary infection, or affected in the disseminated disease. That is why dermatologists have an important role in recognition and early diagnosis of these conditions. Here we present a rare case of invasive cutaneous infection caused by *Purpureocillium lilacinum* in a heart transplant patient.

Materials & Methods: A 64-year-old male patient, who previously received a heart allograft as a part of ischemic cardiomyopathy treatment and was at the time immunosuppressed with tacrolimus and prednisone, presented with atypical skin lesions. The first lesion appeared six months after the heart transplantation as a singular, asymptomatic cutaneous nodule on the dorsum of his right hand, followed by appearance of several smaller nodules and violaceous papules on the shins and multiple pustules on the right scapula. Through the course of few months pustules on the scapula progressed into ulcer with pus-filled discharge. Besides the pain caused by the ulcer, patient reported no other symptoms, including systemic ones. Previously, histopathological analysis of the skin samples (nodule and ulcer) were nonspecific, pointing to chronic inflammation and abscess and patient was treated with topical steroid creams and compress, with no improvement and further progression.

Results: Upon admission to inpatient dermatology department, biopsy of the ulcer at its rim and excision of two whole cutaneous nodules were performed for histological analysis, which showed dermal and subcutaneous granulomas, several with suppurative centres. The methamine silver stained slides revealed fungal structures within granulomas. The smears containing whitish discharge from the ulcer and the nodules were positive for fungal growth and the culture on Sabouraud dextrose agar after three days presented with white to violaceous colonies with a wooly surface. Based on growth and morphological features the culture was positive for *Purpureocillium lilacinum*, which was confirmed with MALDI-TOF mass spectrometry. Patient was treated both surgically (excision of several lesions) and pharmacologically, with two of the antifungal agents (voriconazole, posaconazole) with the lowest minimum inhibitory concentrations (MICs), but the drugs were discontinued due to adverse effects in form of persistent diarrhea. Blood cultures came negative for fungal growth, but repeated biopsy showed persistence of the fungal elements in the tissue.

Conclusion: *Purpureocillium lilacinum* is a ubiquitous saprophytic and filamentous fungus found in environment, especially soil and is widely used in agriculture as a nematicide. Although previously not known for causing infections in humans, it is now emerging pathogen among immunosuppressed patients, particularly those with oncological diseases and recipients of solid organ transplants. Skin is the most frequent site of infection, followed by subcutaneous tissue and eye, but it can easily spread and cause disseminated infection. Cutaneous infection by *P.lilacinum* are often elusive and misleading and are difficult to treat due to high antifungal resistance of the fungus, lack of spontaneous resolution and tendency of becoming recurrent. Early diagnosis by a dermatologist is
essential for better outcome.
Abstract N°: 5905

Tropical Wart Syndrome: How to Approach?

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Introduction & Objectives:

Tropical Wart Syndrome encompasses many infectious dermatological conditions, including leishmaniasis, chromoblastomycosis, sporotrichosis, paracoccidioidomycosis, lobomycosis, cutaneous verrucous tuberculosis and non-tuberculosis mycobacterial infections. These conditions can be difficult to differentiate based solely on clinical presentation, necessitating a thorough clinical interrogation and complementary studies (1).

Our objective is to report a rare and little-known entity that is part of the verrucous syndrome, so that dermatologists take into account all the diagnostic possibilities when faced with this condition.

Materials & Methods:

We present the case of an 83-year-old male patient, a farmer by occupation, with no significant personal medical history. He came to the clinic due to a fall from his own support base with trauma to his left arm and forearm two years prior to the consultation. Two months later, he developed asymptomatic papular lesions with slow growth and the appearance of verrucous lesions. He denied any previous treatment. Physical examination revealed a localized dermatosis affecting the left upper extremity at the elbow level. It consisted of three verrucous plaques covered with hematic crusts and abundant thick yellowish scale, measuring 6 x 3.5 cm, 4 x 3 cm, and 4 x 3.5 cm in diameter, with erythematosus and irregular borders. Based on the clinical presentation and the patient’s origin, fixed-cutaneous sporotrichosis or verrucous tuberculosis, both included in tropical wart syndrome, were suspected.

Results:

Therefore, a direct examination (KOH) was requested, which revealed grouped and round millimeter-sized structures with thick walls, brown in color, divided by a central septum, compatible with muriform cells. Additionally, a skin biopsy was performed, which reported pseudoepitheliomatous hyperplasia in the superficial and middle dermis, with abundant granulomatous-type inflammatory infiltrate containing neutrophils, lymphocytes, macrophages, plasma cells, and multinucleated giant cells containing muriform cells. These studies confirmed the diagnosis of chromoblastomycosis. MALDI-TOF (Matrix-Assisted Laser Desorption/Ionization Time-Of-Flight) was performed, identifying the causal organism as Fonsecaea pedrosoi. General serum laboratory tests (complete blood count, liver function tests, blood chemistry) were ordered, and no abnormalities were found. Treatment with itraconazole 200 mg every 12 hours was initiated. At the 4-month follow-up visit, the patient showed 90% improvement in the lesions but still no mycological or complete clinical cure. The patient is still under treatment.

Conclusion:

The verrucous syndrome encompasses multiple dermatological entities, which are difficult to diagnose. In the specific case of chromoblastomycosis, it is a rare and little-known condition that should always be considered in the differential diagnosis when facing a verrucous plaque. The treatment of chromoblastomycosis is a real
challenge since there is no drug of choice to treat it, and it tends to respond slowly. Our patient showed a favorable response to treatment with itraconazole, which could encourage other dermatologists to use it when facing cases like ours.

Bibliography

Abstract N°: 5921

Acquired Palmoplantar Keratoderma in an Immunocompromised Patient: A Case Report

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Introduction & Objectives:
Syphilis is a systemic disease with versatile dermatologic findings and has been known as the great imitator. The prevalence of syphilis has varied over the years and has increased steadily over the last decade. Particularly affected groups include men who have sex with men (MSM) and HIV infected individuals. The earliest cutaneous manifestations of secondary syphilis consist of well defined, small, erythematous, brown or hyperpigmented macules, which may be localized or generalized (1). Atypical presentations of secondary syphilis include tinea-like, psoriasiform, impetiginoid, vasculitis-mimicking, lupus-vulgaris-like and lichen-planus-like symptoms, which may occur associated to HIV infection (2). Acquired palmoplantar keratoderma is an extremely rare manifestation of secondary syphilis and diagnosis requires a high clinical suspicion (3).

Materials & Methods:
A 42-year-old male with a medical history of stroke and basilar artery dissection in 2020, as well as chronic alcohol, marijuana, and cocaine abuse, who began his condition a month prior to his admission with moderate headache and altered state of mind. A primary care physician ordered laboratory studies where a positive VDRL stood out. Subsequently, he was referred to the Infectology Clinic where an ELISA for HIV resulted positive. Hospitalization was decided for follow-up and treatment.

During hospitalization, our service was notified for evaluation of a dermatosis disseminated to the palms and soles. Upon evaluation, the dermatosis was characterized by hyperkeratotic plaques with perilesional erythema. Additionally, a second disseminated dermatosis was observed on the extremities and trunk, characterized by confluent pink macules and scratch marks. A presumptive diagnosis of acquired keratoderma (secondary syphilis vs verruciform epidermodyplasia) was made and for the second dermatosis, a syphilitic roseola was suspected. We took punch biopsies (palms, soles, and anterior trunk) for histological study as well as a direct smear to rule out the presence of Sarcoptes.

Results:
The biopsy of palms and soles revealed a psoriasiform dermatitis with the presence of spirochetes highlighted with the Warthin-Starry stain. The second biopsy of the anterior trunk showed edema of the papillary and reticular dermis associated with a superficial perivascular lymphoplasmocytic infiltrate. Based on these findings, the diagnoses of acquired palmoplantar keratoderma secondary to syphilis and syphilitic roseola were made. Subsequently, the patient began a weekly regimen of 2.4 million units of IM benzathine penicillin for three weeks, as well as 30% urea every 12 hours on palms and soles. Three weeks later, the patient presented a considerable improvement of the palmoplantar keratoderma and a complete resolution of the roseola.

Conclusion:
Acquired palmoplantar keratoderma in adults may represent a diagnostic challenge for dermatologists. According to the diagnostic algorithm, infectious diseases represent the least common causes of acquired keratoderma, and furthermore, secondary syphilis is a rare cause of this condition. Cases such as this remind us that, in HIV positive patients, atypical manifestations may be present and an exhaustive search for other infections must be carried out.
Abstract N°: 5948

Cutaneous tuberculosis: an unusual presentation

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Introduction & Objectives:

Cutaneous tuberculosis (CT) is a relatively rare and not well-defined disease, accounting for only 1-1.5% of all extrapulmonary tuberculosis.

Despite recent developments in techniques, this form is a challenging diagnosis because of clinical polymorphism as it mimics many differential diagnoses and also avoids microbiological confirmation.

We report a case of unusual presentation of cutaneous tuberculosis in a diabetic patient.

Case report:

A 60-year-old female diabetic patient, presented initially a nodular lesion of the inner side of the right elbow, which has evolved into an ulceration since 6 weeks.

Clinical examination found a rounded, non-painful, well limited ulceration, measured 2 cm / 1.5 cm in size and 3mm in depth, with fibrinous material and surrounded by an erythematous and purplish area. General physical examination found no abnormalities.

A 3 fragment skin biopsy was done, mycological examination was negative, molecular test tuberculosis was weakly positive and histology showed a moderate inflammatory infiltrate composed of central necrotic zone surrounded by epithelioid histiocytes with varied number of multinucleated giant cells and lymphocytes. Systemic investigations haven’t found an extra cutaneous tuberculosis.

Therapeutic management was based on antibacillary association according to the 2RHZE/4RH protocol. The follow up noted a progressive healing with persistence of a linear scar of the elbow.

Discussion:

The most widely used classification system for cutaneous TB is based on the mechanism of propagation; either by direct inoculation, contiguous infection, or hematogenous dissemination.

All clinical manifestations of CTB have a similar histological basis consisting of an inflammatory infiltrate of lymphocytes, epithelioid histiocytes and giant cells. But, differs depending on host’s ability to organize the granulomas.

Mycobacterial culture Löwenstein-Jensen at 37°C, remains the most sensitive method to determine the presence of bacilli, but it usually takes many weeks. For instance, PCR amplification has demonstrated to be a quick and reliable way to identify M. tuberculosis in skin specimen. As it was the case in our patient.

Many forms of CT might progress to ulcers. For instance, Tuberculous gummas manifest by a firm, well limited and painless dermohypodermic nodules, that fluctuate and evolve into ulcers, which was described by our patient. However, this hematogenous form is frequent in malnourished children, and adults with compromised immune systems; so skin lesions are usually multiple. Our patient had an atypical clinical presentation, as it only had a
solitary lesion and no underlying immunosuppression was found. Literature review also found some reports of
gummas in immunocompetent adults.

Histology shows suppurative granulomata with nonspecific infiltrates, like in our case.

Several atypical manifestations of CT were reported, including Ulcerative form, sometimes Pyoderma
gangrenosum-like, which can be the case for our patient.
Therefore, when dealing with any type of cutaneous granulomatosis, the diagnosis of tuberculosis should be
always considered.

**Conclusion:**

Through this observation, we would like to emphasize that diagnosis of CT should always be kept in mind, even in
solitary or atypical clinical presentation. And in our context endemic tuberculosis, we urge the importance of early
diagnosis and treatment in order to avoid systemic and unesthetic scarring complications.
Herpes zoster oticus (Ramsay Hunt syndrome): Case report and literature review

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Introduction & Objectives: Ramsay Hunt syndrome is characterized by the reactivation of the varicella-zoster virus at the geniculate ganglion, resulting in acute herpes zoster. It presents with specific clinical features such as a vesicular rash on the ear (known as herpes zoster oticus) or in the oral mucosa, accompanied by acute peripheral facial nerve paralysis. Other cranial nerves, including V, IX, XI, and XII, are frequently affected as well. The clinical presentation of Ramsay Hunt syndrome can vary due to different patterns of skin involvement, which are explained by individual connections between cranial and cervical nerves. Treatment typically involves a combination of antiviral medications and steroids. Early diagnosis plays a critical role in improving nerve damage associated with Ramsay Hunt syndrome, emphasizing the importance of prompt initiation of treatment.

Case report:

A 64-year-old man presented at our hospital with right-sided ear pain and numbness for 2 days, followed by the development of a vesicular rash on the right side of his face. There were no previous complaints of headaches, tinnitus, dizziness, or hearing loss. Neurological examination revealed facial paralysis and a vesicular rash in the concha without sensory deafness. Routine laboratory tests, including retroviral screening, were normal. A clinical diagnosis of Ramsay Hunt syndrome (RHS) was considered based on the ear pain, facial paralysis, and typical dermatomal distribution of the skin eruption. He was started on oral valacyclovir 1g three times a day (TDS) for 7 days and prednisolone 60mg per day for 5 days. Two days after starting the treatment, the vesicular lesions disappeared, but the neurological examination revealed persistant facial paralysis on the right side.

Discussion:

In 12% of cases of peripheral facial palsy, otic involvement is attributed to herpes zoster viral infection. The reactivation of latent VZV infection in the geniculate ganglion leads to symptoms such as ear pain, vesicular rash on the ear, and peripheral facial palsy. This condition is rare, with an annual incidence of 5/100,000, but it is the second most common cause of non-traumatic peripheral facial palsy. The prognosis for facial palsy is worse in Ramsay Hunt syndrome compared to idiopathic forms. Only 10% of patients with complete facial palsy achieve complete recovery. The initial involvement of the facial nerve is a result of inflammation caused by viral neuronitis, followed by facial nerve edema as a secondary effect. According to reports, initiating early treatment with a combination of acyclovir and prednisone has shown effectiveness in treating Ramsay Hunt syndrome. Antiviral medications like acyclovir and famciclovir have been found to alleviate acute pain, promote healing of herpes zoster lesions, and help prevent the development of postherpetic neuralgia.

Conclusion: Ramsay Hunt syndrome is a rare cause of facial palsy, characterized by severe dysfunction and a poorer prognosis for the facial nerve compared to Bell’s palsy. The combination of acyclovir and high-dose corticosteroids has been found to enhance the functional recovery of the facial nerve.
Molluscum contagiosum is a self-limiting infectious dermatosis that often occurs in children and is also diagnosed in sexually active adults and immunocompromised individuals. The causative agent is a DNA-containing virus of the Poxviridae family. The disease is transmitted by direct contact with infected skin, which can be non-sexual (contact), sexual or autoinoculation.

Materials & Methods:

This is the incidence of molluscum contagiosum structure retrospective study by analyzing outpatient children and adult patients medical records of the dermatovenereological department for the period from 2019 to 2022.

Results:

In 2019, the molluscum contagiosum absolute number was 89 cases, of which 18 (20%) adults and 71 (80%) children. In 2020, the number of detected cases of molluscum contagiosum increased by 54%, of which 116 (61%) adults and 76 (39%) children, in 2021 - 145 cases (the number of cases increased by 39% compared to 2019), out of of which 65 (45%) adults and 80 (55%) children, 123 cases were detected in 2022 (36% lower compared to 2020), of which 78 (64%) children and 45 (36%) adults. Over a four-year follow-up period, along with the absolute number of molluscum contagiosum detected cases increase in 2020 and 2021 compared to 2019 and 2022, changes in the ratio of the cases number depending on age were revealed. At the same time, the absolute number of children cases infection detection did not differ significantly during the observation period. Despite the fact that in 2020 the number of visits due to anti-epidemic measures related to Covid 19 decreased by almost 2 times, the share of detection of molluscum contagiosum increased: in 2019 it was 0.17%, and in 2020 it was already 0.5% of all visits the dermatovenerological department. In addition, the proportion of patients with molluscum contagiosum, gradually decreasing during the period of easing anti-epidemic measures (2021-0.2%), returned to the pre-pandemic value in 2022 (2022-0.17%).

Conclusion:

Thus, the increase of patients number who applied with a diagnosis of molluscum contagiosum in 2020 and 2021, compared to 2019 and 2022, was mainly due to an increase in the number of patients over 18 years of age. The smallest proportion of patients under 18 compared to the total number of cases of molluscum contagiosum was noted in 2020 (35.9%) at the peak of the Covid19 pandemic, the largest proportion in 2019 before the onset of the Covid19 pandemic was 79.8%. The reasons for the change in the incidence of molluscum contagiosum sample may be associated with the epidemiological characteristics of viral infections.
Abstract N°: 6101

**Mycetoma (Madura foot): A Case Report of a Rare Tropical Disease in Morocco**

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**Mycetoma (Madura foot): A Case Report of a Rare Tropical Disease in Morocco**

**Introduction & Objectives:**

Mycetoma or Madura’s foot is a chronic inflammatory pathology, with a progressive evolution due to a fungal or bacterial infection affecting the cutaneous and subcutaneous tissues resulting in the appearance of a polyfistulized pseudotumor. It is endemic in tropical countries, but rare in temperate climates. Untreated, this condition progresses to the destruction of soft tissues and adjacent bone structures with deformation of the affected limb.

**Materials & Methods:**

A 50-year-old man, native and living in northern Morocco, nurseryman, consulted the dermatology department for a polyfistulized tumor on the plantar surface of the left foot. The disease had started 20 years earlier with a subcutaneous nodule which had gradually increased in volume, thus hampering walking.

The clinical examination on admission found swelling of the outer edge of the foot and the left ankle next to the external malleolus, dotted with a few nodular lesions with fistulous paths on the dorsal and plantar surface.

Examination of lymph node areas objectified a left inguinal lymphadenopathy and the rest of the somatic examination was without abnormality.

**Results:**

An X-ray of the foot showed diffuse gaps with the beginning of bony borders and rupture of the cortical.

A skin biopsy was performed, in favor of an actino-mycotic mycetoma caused by Actinomadura madurae.

The patient was put under strong sulfatmethoxazol-trim with a good evolution.

**Conclusion:**

Mycetomas are forgotten tropical diseases, although sporadic cases have been reported in many non-endemic regions. The diagnosis must be evoked in front of chronic suppurative lesions with issue of grains. In doubtful cases, the anatomopathological examination of a biopsy specimen or a surgical excision provides certainty.
Co-isolation of fungal and bacterial agents in mycetoma of the foot: response to dual antibiotic-antifungal therapy

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Introduction & Objectives:

Mycetoma is a subcutaneous fungal infection, recently recognized by the World Health Organization as a neglected tropical disease. Mycetoma is represented by the formation of discharging sinuses, tumour-like swellings, and the presence of grains.

Materials & Methods:

A 57-year-old male arrived to our clinic with chronic swelling and nodules localized to his right foot. He had no relevant medical history. Five years prior, a slightly raised non-painful papule had appeared on the sole. He labored as a farmer, but could not recall any previous injury to the area. The lesion slowly developed into multiple subcutaneous nodules, some of which fistulized and exhibited purulent discharge with small white grains. Seven months prior, he sought medical attention and he was treated with TMP-SMX 160/800 mg TID, without response.

Our physical exam revealed the presence of a subcutaneous mass with scarring, sinus tracts and a viscous purulent exudate. Although the lesions were not painful, the swelling somewhat hindered adequate walking. Skin biopsy was unremarkable (revealing pseudoepitheliomatous hyperplasia, some inflammatory cells comprised mainly of neutrophils, and the presence of several scarring tracts).

The exudate was examined with a 10% KOH preparation, where it exhibited irregular round-shaped grains, yellow-to-white in color, with filamentous fringes, consistent with actinomycetoma. Skin tissue was also examined with KOH, which in addition to the grains previously mentioned, displayed the presence of hyphae within the tissue. The PCR assay showed genetic material compatible with both Actinomadura spp and a fungus belonging to the order Pleosporales. After these findings, itraconazole 200mg twice daily was added to the patient’s regime.

Additionally, MRI revealed osteolytic lesions in the talus bone, which displayed the distinctive “dot-in-a-circle” sign. Consequently, amikacin was also prescribed, at a dose of 500mg BID. We followed the well-recognized Welsh regime, in which the combination of amikacin and TMP-SMX is prescribed for three weeks, followed by the administration of only TMP-SMX for two more weeks.

At 9-months follow-up—and after four five-week cycles of the Welsh regime—the addition of itraconazole has resulted in notable improvement, with a marked decrease in tissue volume and the resolution of nodular lesions, with only residual scarring and discoloration remaining.

Results:

In this patient, clinical appearance, the presence of white grains and MRI findings suggested actinomycetoma. However, TMP-SMX had been used seven months prior, with no significant improvement. After the direct visualization of fungal structures and the presence of fungal DNA in the PCR assay, itraconazole was added to the patient’s regime. This change demonstrated a significant decrease in size, morbidity and severity.

Conclusion:
The coexistence of bacteria and fungus in mycetoma is incredibly rare, and seldom described in literature. Both agents can be found in soil and vegetable matter, and since its route of entry is through traumatic inoculation, it stands to reason that multiple organisms could be found in a single patient. However, this is usually not the case, and to our knowledge only three other cases have been described in the literature. We believe this case reflects the importance of isolating the etiologic agent within a chronic granulomatous infection, especially in cases resistant to therapy.
Imported Tungiasis: A case report from Greece

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Title: Imported Tungiasis: A Case Report from Greece

Introduction & Objectives:

Tunga penetrans is an endemic parasite in Central and South Africa. The objective of this study was to present a case of Tunga penetrans infection in a patient who traveled to South Africa.

Materials & Methods:

A 55-year-old male patient presented with new lesions bilaterally on the soles of his feet at the Dermatological Clinic of Asclepion Hospital in Athens, Greece. Clinical examination revealed yellowish nodules with a central erythematous region on the plantar surface of the first finger of the left lower leg and on the subungual surface of the second and third fingers of the right leg. The patient had recently returned from a trip to South Africa where he walked barefoot. There was no history of infectious diseases. Laboratory investigations showed elevated levels of transaminases. Clinical examination indicated a possible presence of a parasite.

Results:

Specimens from the lesions were subjected to molecular testing using the protocol described by Gerloff et al. (1995). The cytochrome oxidase II (COII) gene was amplified using primers mtD-13= TL2-J-3034 (5’-AAT ATG GCA GAT TAG TGC A-3’)/mtD20=TK-N-3785 (5’-GTT TAA GAG ACC AGT ACT TG-3’). The amplified DNA was isolated, separated on an agarose gel, and purified. All specimens tested positive for Tunga penetrans. The parasitic lesions were surgically excised, and local application of ivermectin cream was supplemented with oral administration.

Conclusion:

Tungiasis is a parasitic infection caused by Tunga penetrans, which is primarily found in soil. It affects the plantar surface of the feet and is endemic in many countries, with an epidemic prevalence in sub-Saharan Africa. The parasitic infection should be considered a transborder infection and included in the differential diagnosis for patients with a history of travel to endemic areas. Treatment involves surgical excision of the parasites and the application of antibiotics. Wearing shoes can serve as a preventive measure against the disease.
Abstract N°: 6194

Atypical Manifestations of Old World cutaneous leishmaniasis: A systematic review on unusual clinical and specific anatomical presentation

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Introduction & Objectives:

Cutaneous leishmaniasis (CL) is the most prevalent type of leishmaniasis. In addition to significant medical burden of diseases, the existence of long-term wounds and unpleasant CL-related scar formation need a plan for CL control, especially in endemic areas. The aim of this study was to gather data that will provide useful classification on atypical presentation of CL for practitioners. Furthermore, in this study we gathered and categorized clinical original images from our clinical experience with CL to make a clinical atlas for add to the literature.

Materials & Methods:

A systematic search on atypical manifestations of old-world CL was done with MeSh-based keywords on online database of PubMed on January 2023. The records were evaluated and the eligible articles were selected.

Results:

Based on clinical manifestations of eligible studies, articles were assigned to the following categories: (a) acute CL, (b) chronic CL, (c) CL associated with lymphatic involvement, (d) CL associated with an immunocompromised state, and (e) cutaneous leishmaniasis on special anatomical site. Then, clinical, diagnostic, and therapeutic aspects were discussed.

Conclusion:

The diagnosis of leishmaniasis is sometimes challenging. Due to the expanding spectrum of differential diagnoses of the CL in clinical practice, dermatologists, pediatric dermatologists, internists, infectious diseases physicians, and pediatricians should be aware of this classification of atypical CL.
Abstract N°: 6203

**A case of Histoid Leprosy in a 25 year old Filipino female**

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**Introduction & Objectives:**

Histoid leprosy is a rare disease with specific clinical and histologic features. It may appear as papules and nodules with little to no symptoms. An abundance of bacilli and spindle like histiocytes are seen in histopathology. Multi-drug therapy is the treatment of choice.

**Materials & Methods:**

We present a rare case of Histoid Leprosy in a 25-year-old Filipino female. The patient presented with a 1-year history of skin-colored to hyperpigmented, mildly pruritic, papules and nodules on bilateral upper and lower extremities. Physical examination also showed a few skin-colored papules on the ears and a saddle nose deformity. Neither loss of sensation nor nerve enlargement were appreciated. The patient had a history of Hansen’s disease fifteen years prior to the consultation and claimed to have been treated completely for twelve months. Skin punch biopsy and slit skin smear was requested.

**Results:**

Histopathologic examination revealed consistency with histoid leprosy, described as nodular proliferation of spindled cells admixed with foamy histiocytes, plasma cells, and globi formation. The Fite-Faraco stain was positive with a bacillary index of 6+. The diagnosis of Histoid Leprosy was made and the patient was started on multi-drug therapy. Dapsone was removed from the regimen due to low glucose-6-phosphate dehydrogenase assay. The regimen was composed of Rifampicin 600 mg once a month, Clofazimine 300 mg once a month, then 50 mg once a day, and Ofloxacin 400 mg once a day for two years.

**Conclusion:**

Histoid leprosy is a rare form of lepromatous leprosy that can develop after previous monotherapy, multi-drug therapy, or de novo. This type has a distinct clinical appearance and diagnostic morphology. Recognizing different types of leprosy is important for raising awareness about rare clinical disease presentations, preventing misdiagnosis, and global eradication of leprosy.
An unusual case of purpura fulminans due to Klebsiella pneumoniae infection

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Introduction:

Purpura fulminans is a rare, life-threatening condition characterized by disseminated intravascular coagulation, circulatory collapse, and dermal vascular thrombosis resulting in hemorrhagic purpuric skin changes. The pathohistological findings typically include dermal vascular thrombosis along with microthrombi in the dermal blood vessels.

Materials and Methods:

We present a patient with fulminant purpura which was accompanied by hemorrhagic purpuric changes on the face and hands. Early initiated empiric antiobiotic therapy resulted in a favourable outcome in our patient.

Results:

An 89 year old female patient was hospitalized due to deep vein thrombosis of the right iliac artery and chronic kidney insufficiency. CRP levels were significantly elevated. The patient had a history of bladder carcinoma along with right-sided hydronephrosis of the 4th degree. The patient had a priorly placed urinary catheter and percutaneous nephrostoma in a left kidney. A central venous catheter was placed in a left jugular artery. Blood cultures were sterile. In the urine culture, Klebsiella pneumoniae OXA-48 were isolated. The patient presented with black hemorrhagic crusts on both ears, as well as on the radix and dorsum of the nose. Disseminated ecchymoses and purpura were observed on the dorsal sides of the hands and bilaterally on the forearms. Coagulation laboratory tests showed increased levels of fibrinogen and D-dimers. PT and PTT levels were normal, excluding probability for DIC. Levels of procalcitonin were significantly increased (>2.0 ng/mL) which raised suspicion of systemic bacterial infection. A skin biopsy was performed and vasculitis was ruled out. During hospitalization, empiric antibiotic therapy with ciprofloxacin 2x400 mg intravenously was started. After insight into urine cultures, antibiotic therapy was switched to a ceftazidime/avibactam 2g/0.5g intravenously 3 times a day, ultimately leading to a reduction in inflammatory parameters, and swift improvement in renal function as well as the patient’s general state.

Conclusion:

We describe a case of fulminant purpura in a patient with a urinary infection caused by Klebsiella pneumoniae. It was first considered that skin changes in the patient were a result of a thromboembolic incident with possible deposited material in the form of thrombus, metastases or bacterial embolus. The pathohistological findings ruled out vasculitis. Considering to the isolation of Klebsiella pneumoniae from the urine sample, markedly increased inflammatory parameters and ultimately the improvement of the patient’s condition after the introduction of antibiotic therapy, it was concluded that the hemorrhagic purpuric skin changes were most likely induced by a bacterial infection; in this case Klebsiella pneumoniae.
DERMATOLOGICAL MANIFESTATIONS IN HIV-INFECTED PATIENTS At Souss Massa University Hospital Center, Agadir

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Introduction & Objectives:

Skin disorders are extremely common and cause significant morbidity in human immunodeficiency virus (HIV)-infected individuals. There are few data on their prevalence and association with CD4 counts in Morocco.

The aim of our work was to describe the dermatological manifestations in HIV-positive subjects seen in dermatology consultation and hospitalization in our university hospital center.

Materials & Methods:

This is a retro-prospective, descriptive study on dermatoses in HIV-positive patients seen in dermatology consultation and hospitalization in our university hospital center over a period of 2 years from June 2021 to May 2023.

Results:

During the study period, 28 HIV+ patients were included. The patients were divided into 17 men (60.71%) and 11 women (39.28%), the sex ratio is 1.54 M/F. The age of the patients varied from 1 to 75 years with an average age of 41.17 years. 28.57% of the patients were married, 46.62% single, 17.85% divorced and 7.14% widowed. The most common mode of HIV transmission was heterosexual (79.55%), followed by homosexual / bisexual contacts (20.45%).

The average CD4 count was 292.42 CD4/mm3. 35.71% of patients had a CD4 count below 200 CD4/mm3 and 64.29% had a CD4 count between 200 and 500 CD4/mm3.

oral candidiasis (18.18%) was the most common skin disorders, zoster herpes (9.09%), Kaposi’s disease (9.09%), prurigo (9.09%), scabies (6.81%), ano-genital warts (6.81%), urticaria (4.54%), perianal abscess (4.54%), diffuse molluscum contagiosum (4.54%), HPV infections (4.54%), lichen (4.54%), seborrheic dermatitis (2.27%), rosacea (2.27%), onychomycosis (2.27%), ringworm of the scalp (2.27%), cutaneous B-cell lymphoma (2.27%), Buschke-Lowenstein tumor (2.27%) and psoriasis (2.27%).

According to the bivariate analysis, fungal infections occur more frequently if the CD4 count was less than 200 CD4/mm3 (p < 0.001). Kaposi’s disease, cutaneous B-cell lymphoma and Bushke-Lowenstein tumor were more frequent if the CD4 count was less than 200 CD4/mm3 (p < 0.001)

Conclusion:

Cutaneous disorders occur more frequently as HIV infection advances and immune function deteriorates; however, they are common and of various types throughout the course of HIV disease. Taking cutaneous disorders into consideration for case management is essential to improve quality of life for HIV-infected patients.
Introducing a novel SQLE mutation in terbinafine resistant T. indotinea isolates among individuals with recalcitrant dermatophytosis from Iran

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Introduction & Objectives: Since 2018, there has been a rising number of reports regarding global recalcitrant dermatophyte infection. The widespread mechanism of resistance has been attributed to the mutations of the SLQE gene, and several mutations have been registered in the Gene bank. The objective of this article was to discuss recent concerns about terbinafine resistance in the case of T. indotinea as the novel resistant etiology of tinea infection, and to reassess the circulating mutations of SLQE gene in the region of middle east.

Materials & Methods: Sixty-three patients with confirmed clinically recalcitrant tinea corporis/ cruris infection from Tehran, Iran, diagnosed from Dec 2020 to Dec 2022, were enrolled initially. Demographic and medical history, were recorded by a dermatologist; all patients were treated with terbinafine 250 mg/day for at least 6 weeks but did not show clinical improvement. Mycological and molecular identification of the etiologic agent was saw fit and performed via direct microscopic examination, mycological culture and polymerase chain reaction (PCR) assay with internal transcript spacer (ITS) in zones 1 and 2; the latter was conducted in order to distinguish the exact subtypes of the T. mentagrophytes family. Patients with T. indotinea infection were selected (29 patients). Moreover, subjects were asked to stop any antifungal treatments for minimum of 2 weeks in order to be prepared for the Antifungal Susceptibility Test (AST). AST was performed in order to distinguish terbinafine resistant species (MICs ≥ 1 µg/mL) for complementary SQLE sequencing. Further analysis was performed on the sequencing results to determine the changes in the translated amino acids.

Results: The mean age was 37.71 years old (18-70). Gender distribution was 15/29 (51.72%) females and 14/29 (48.27 %) males. Almost all subjects were infected for more than a year prior to this study. All patients used one or two lines of systemic and topical antifungals. According to AST results, 10 isolates were able to grow on the terbinafine containing wells [these had an MIC range of 0.5- 1+ µg/mL]. Seven cases were terbinafine-resistant [MIC ≥ 1 µg/mL]; interestingly, these also showed treatment failure to itraconazole in clinical setting. After sequencing of the SLQE and complementary analysis of amino acid translation, seven had a mismatch at position 1177, which showed an A/C change associated with Phe397Leu amino acid substitution. In line with previous data, Phe397Leu substitution is the most common mutation correlated with terbinafine resistance in T. indotinea isolates. One case had an extra expressed mutation leading to amino acid substitution of Leu393Ser. Present finding suggests a novel SLQE mutation that is reported for the first time in T. indotinea isolates in Iran and the region of middle east.

Conclusion: Our study revealed a high level of terbinafine resistance in clinical samples which is a serious warning for patients prone to dermatophytosis. Our findings revealed a new mutation in the SQLE gene. Present outcome emphasizes on continuous evolution of novel mechanisms of terbinafine resistance in T. indotinea. Analyzing the outline of resistance of T. indotinea isolates could therefore make a chance for prediction of regional resistance status, and possible future epidemiological changes that can help breaking the resistance chain; through reinforcing antifungal stewardship guidelines and designing new antifungals classes.
A Case of Erythema Nodosum Leprosum as an Early Manifestation of Multibacillary Leprosy in Elderly Patient

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Introduction & Objectives: Erythema nodosum is the most common form of septal panniculitis resulting from a hypersensitivity reaction as a response to many antigens or triggers. Erythema nodosum is generally idiopathic, but can also be caused by infections such as by Mycobacterium leprae infection which manifests as erythema nodosum leprosum. This case was presented to determine the presence of a rare clinical picture of erythema nodosum leprosum as an early manifestation of untreated cases of leprosy.

Materials & Methods: This case report presents a male patient, 68 years old, complaining of tingling sensation in upper and lower extremities since 3 months ago accompanied by multiple painful reddish lumps on both lower and upper extremities. The lesions are obtained in the form of multiple erythematous mobile nodules of round shape with a diameter of 2-4 cm scattered discrete accompanied by shiny soft surfaces in upper and lower extremity. On gross examination, neither hypopigmentation nor hyperpigmentation characteristic of Morbus Hansen’s lesions were found, most of the lesions were nodules that felt pain so that the patient was first diagnosed as an erythema nodosum. No nerve enlargement was found. Histopathological examination were done, obtained the epidermal layer of squamous cells with cell nuclei without signs of atypia and in the sub-epithelium found edematous dermis stroma accompanied by vasal dilatation and around it appears infiltration of lymphocyte cells, neutrophil polymorphonuclear, plasma cells, macrophages, and multinucleated giant cells supports the condition of erythema nodosum. Acid fast bacteria examination shows the presence of a +4 bacterial index of the both ear and some nodules in the lower extremities. The patient was diagnosed with lepromatous borderline type leprosy with erythema nodosum leprosum without any history of medication and without characteristic lesion of Morbus Hansen.

Results: Multidrug therapy with rifampicin, klofazimine and dapsone was initiated as long with methylprednisolone 16 mg/day tapering off, paracetamol, and vitamins B1, B6, and B12, giving improvement for the tingling sensation and disappearance of nodules and no more feel pain.

Conclusion: Erythema nodosum leprosum can be the first manifestation of untreated morbus hansen, especially in patient with a high bacterial index, even in case where no anesthetic lesions were found as characteristic lesions of Morbus Hansen.
Abstract N°: 6332

A rapid review of efficacy and pain infliction among newest treatment modalities for cutaneous viral warts

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Introduction & Objectives:

Warts are prevalent benign cutaneous lesions caused by the human papillomavirus. In recent years new treatment methods have emerged as promising alternatives to common destructive and often painful modalities.

Materials & Methods:

A rapid review was performed in a PubMed bibliographic database using a search string “Warts/therapy”[MAJR]. The search was limited to articles published from 2013 onwards and articles with a study population of more than 10 patients. Only the first 101 articles were examined. The efficacy was defined as clearance of all visible warts for a single patient.

Results:

In total, 40 articles were included with 30 different treatment modalities compared in terms of efficacy and pain infliction. The highest efficacy of 95.6% was seen with intralesional Vitamin D3 in a study by Zainab Z et al. In total, 8 studies assessing intralesional Vitamin D3 were identified showing efficacy rate from 20% to 95.6%. As a comparison, cryotherapy was studied in 13 articles with efficacy rate from 23.7% to 76.7%. From the most effective treatment modalities most were intralesional methods - intralesional vitamin D3 (up to 95.6% efficacy), intralesional zinc sulphate (up to 93.4% efficacy for injected wart only), intralesional combined furosemide and digoxin (up to 92.5% efficacy) and intralesional tuberculin purified protein derivative (up to 86.7% efficacy). The least painful modality with highest efficacy was photodynamic therapy using Eosin-Trans studied in one article. The efficacy of this modality was shown 86.4% with no pain in any of the participants (Ibrahim NA et al.).

Conclusion:

Intralesional Vitamin D had the highest efficacy rate and is therefore a very promising alternative to current destructive treatment modalities and furthermore has also the advantage of targeting multiple distant viral warts. Photodynamic therapy using Eosin-Trans had the highest efficacy together with least pain, which is very practical for the treatment of children, which are the main patient population.
Abstract N°: 6376

demodicosis mimicking in immunocompromised patients: a case series.

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Introduction & Objectives:

There are various differential diagnosis of facial skin lesions. Some facial skin lesion could be distinguished easily from history taking and clinical examination but in immunocompromised patients this could be tricky.

Demodicosis is a skin disease caused by Demodex spp. that could be found in patients on immunosuppressive therapy such as systemic lupus erythematosus (SLE). The objectives of this case series is to understand probability of Demodex spp. infection in immunocompromised patients that sometimes mimicking other skin diseases in facial area for examples steroid-induced acne, seborrheic dermatitis, true rosacea, or simply malar rash lesion.

This case series reports featured skin lesions of demodicosis in patients with SLE which misdiagnosed at first.

Materials & Methods:

The first case was a female, 18 years old with itchy reddish papules in malar area on her face for 4 months treated with topical steroid and no clinical improvement. The second case was a man, 53 years old complaints of nodules and multiple papules on his face since 2 months ago, already treated with oral antibiotics without clinical improvement. The third patient is a female, 24 years old with complaints of multiples papules, scales and hyperpigmentation diagnosed with seborrheic dermatitis.

Results: All the patients then underwent 10% KOH examination, dermoscopy analysis, and the diagnosis of demodicosis was confirmed. All were treated using a combination of oral ivermectin and 5% permethrin cream. Within 2 weeks all the patients satisfied with the results.

Conclusions:

Demodicosis that occurs in immunocompromised patients or patients taking immunosuppressants is called secondary demodicosis. Immune system dysregulation and administration of immunosuppressant drugs in SLE cause an increase in Demodex spp. infestation. In this case series, all the patients showed typical sign for skin disease, such as malar rash in SLE, and seborrheic dermatitis, so it will be more difficult to confirmed demodicosis as the first diagnosed.** Dermatologist should consider demodicosis in patient with immunocompromised as important differential diagnosis since it is not easily differentiated from other facial skin diseases.
Abstract N°: 6393

Atypical presentation of Tinea incognito resembling Erythema annulare centrifugum

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Introduction and Objectives:

Tinea incognito is a dermatophyte infection of the skin. Dermatophyte infections often have atypical presentation attributed to inappropriate treatment with immunosuppressive medications, mostly with corticosteroids or calcineurin inhibitors. Because of the different variations the term “the new imitator” for tinea incognito, are making it the third of such well-known imitators. Tinea incognito has wide range of clinical manifestations, imitate many skin diseases and should, therefore, be considered in any chronic, erythematous, scaly skin lesions not responding to topical treatment.

In this report, we present a case with tinea incognito that was misdiagnosed as Erythema annulare centrifugum. The patient had a very good response to antifungal treatments.

Results:

A 39-year-old Caucasian woman presented to our office with an approximately four-month history of pruritic erythematous scaly plaques and papules primarily located in the ventral surface of her feet, with affection of protuberated areas. She was examined by general practitioners who diagnosed the eruption as eczema. The patient applied a topical steroid for more than a month, without improvement. The lesions progressed to her trunk, limbs, axillar and inguinal area and she referred to our Dermatology Clinic. She denied a history of previous skin problems or other significant illnesses and had no specific travel history or any specific contact. She had no family history of any significant diseases. No family members had similar skin eruptions or symptoms.

The dermatologic physical examination was remarkable for multiple scaly, extensive crusted erythematous plaques and papules mostly located on the trunk. The lesions had ill-defined borders, periphery desquamation with dimensions greater than 20cmx15cm. Annular erythematous scaly patches with well-defined border were noticed on the ventral site of the both feet, knees and elbows. General physical examination was normal. Her general laboratory data that included renal and liver function tests, and blood cell counts were normal. An incisional biopsy was taken from one of her lesions with the impression of Erythema annulare centrifugum. Histologic examination showed compact orthokeratosis with focal parakeratosis and neutrophil aggregates, mild irregular acanthosis, and focal mild spongiosis. The upper dermis showed a mild perivascular infiltrate, which included mainly lymphocytes admixed with a few eosinophils and neutrophils. PAS staining showed few hyphae focally in the keratinized layer. A KOH smear from the trunk showed branching mycelium.

The patient was prescribed terbinafine (250 mg daily) along with ketoconazole cream applied twice daily and ketoconazole shampoo. She had a very good response to treatment.

Conclusion:

Tinea incognito is a common pitfall in dermatological practice in recent years, with a remarkable increase in the prevalence. In this case report the patient had history of topical steroid use for a few months followed by progression of the disease. The picture was completely similar to Erythema annulare centrifugum with extensive affection. According to this report, tinea incognito should always be considered by dermatologists when
confronting patients with pruritic eczematous lesions of the skin.
Abstract N°: 6406

**pustular tinea gladiatorum**

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**Introduction & Objectives:**

**Materials & Methods:**

**Results:**

A 25-year old male Caucasian patient presented with a 2 days history of erythematous macular rash evolved into pustular vesicles, localized on the extensor surface of both antebrachium extremitas. The patient describes the same characteristics of lesions on a teammate from the sports boxing club. Subsequently the diagnosis of pustular tinea gladiatorum was confirmed via native microscopy and microbiological cultures. Treatment with Terbinafine 250 mg tab was undertaken for a period of 3 weeks, which resulted in full recovery with no scars or hyperpigmented macules.

We report a rare manifestation of pustular lesions tinea gladiatorum with typical localization and highlight the importance of attention to skin care and it’s medical surveillance.

**Conclusion:**
Abstract N°: 6433

The position of phytotherapy in the management of dermatological conditions: a survey conducted in the north of Morocco.

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Introduction & Objectives:

Phytotherapy is currently experiencing a real craze within the North African and Moroccan population, especially in the treatment of common dermatological pathologies. Traditional medicine practices vary greatly from one country to another and from one region to another. They are influenced by known factors: culture, history, and personal philosophies. Natural products are of great interest as raw materials for various sectors such as cosmetics, pharmacy, agri-food, phytosanitary, and industry.

Materials & Methods:

This is a prospective cross-sectional descriptive study spanning a period of 6 months from 6/2022 to 12/2022, including patients received during consultations in the dermatology department of the university hospital center in Tanger. The tool for this survey was a questionnaire translated into dialectal Arabic consisting of 3 parts: the first part contained information about the study’s objective, the second part was reserved for the socio-cultural profile, and the third part was reserved for selected diseases. Data was collected, entered, and analyzed using "IBM SPSS 25" software.

Results:

We recruited 215 patients suffering from various dermatoses, who had used phytotherapy in the past five years. There was a predominance of females with a sex ratio of 3 (Figure 1), and the average age was 32 years (Figure 2). Most of the patients were of low socioeconomic status (76.2%) (Figure 3).

Our survey identified 50 species of plants belonging to 26 botanical families used in the form of aqueous maceration (54.6%), infusion (37.4%), and decoction (11.8%).

The most commonly treated conditions with phytotherapy were alopecia (37.4%), where Allium sativum (garlic) was the most frequently used plant (40%). Garlic was also frequently used in the treatment of superficial mycoses (13.1% of the population). For acne (20.7%), the most frequently used plants were Melaleuca alternifolia, Aloe vera, and Curcuma longa, with percentages of 26.4%, 22.6%, and 21.6%, respectively. Eczema was the third most commonly treated condition with phytotherapy, accounting for 17% of cases, with Lawsonia inermis being used in 36.1% of treated cases (Figure 4).

The degree of satisfaction varied from patient to patient, with the majority (76%) reporting satisfaction with results ranging from partial regression of lesions to complete whitening, complete hair regrowth for patients with alopecia. However, 24% of patients were dissatisfied due to the lack of improvement or worsening of their dermatoses.

Side effects encountered were infrequent to rare, with eczematization reported by 13 patients, 8 patients who used henna (Lawsonia inermis), and 5 patients who used garlic (Allium sativum). Irritation was reported by 5 patients who used garlic (Allium sativum) and by 3 patients who used tar, of whom 3 had associated superinfection. Additionally, two-thirds of patients who used garlic (Allium sativum) reported tingling sensations.
during use. Six patients who used Curcuma (Curcuma longa) to treat their melasma reported digestive symptoms such as bloating and nausea.

Conclusion:

In light of this study, the use of phytotherapy is widely prevalent among the Moroccan population. These medicinal plants are beneficial in certain cases due to their richness in active biochemical and organic components. However, unfortunately, their anarchic use potentiates their deleterious effects, hence the importance of rationalizing and systematizing this therapeutic practice.