



## Abstract N°: 31

### Exploring long-term sequelae following epidemic Mpox reveals a high frequency of scarring

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#### Introduction & Objectives:

Mpox incidence of the 2022 epidemic among men who have sex with men (MSM) caused by the monkeypox virus (MPXV) has substantially decreased, yet new cases are still occurring. Particularly in high-income countries, transmission occurs primarily during sexual activities. The epidemic caused by MPXV clade IIb is usually a self-limiting disease with low mortality, which contrasts with 1-10% mortality rate reported for endemic Mpox caused by clade I. However, individuals infected with the epidemic MPXV clade IIb are frequently concerned about potential scarring as permanent sequelae. While scar formations are a common feature of smallpox and endemic Mpox caused by MPXV clade I, it is unclear whether lesions of the less virulent clade IIb 2022 outbreak resolve without scars. We thus aimed to investigate the long-term outcome defined as the incidence of scarring following Mpox infections of the 2022 outbreak.

#### Materials & Methods:

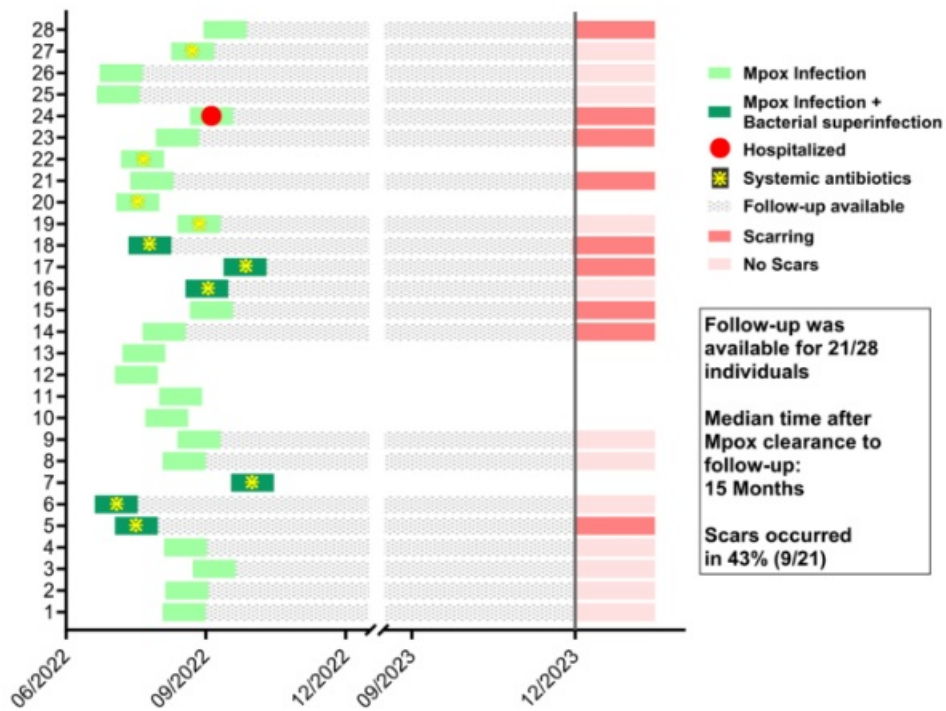
All individuals diagnosed with Mpox at the Department of Dermatology at the Medical University of Vienna in 2022 were included in this analysis. Follow-up data was collected throughout November 2023. "Scarring/scar formation" was defined as having at least one scar at the former active Mpox lesions.

#### Results:

Twenty-eight cases of Mpox were detected between 06/2022 and 10/2022 (Figure). All occurred among MSM 100% (28/28), 46% (13/28) were living with HIV, whereas 32% (9/28) were using PrEP. All patients were symptomatic: pain (68%, 19/28), lymphadenopathy (54%, 15/28), papules (54%, 15/28), pustules (43%, 12/28) and ulcers (68%, 19/28) whereas three patients also presented with a generalized rash. Three individuals had a co-infection with gonorrhea, and in a single person early syphilis was diagnosed. Secondary bacterial infection of Mpox lesions was suspected in 6 individuals, and all received systemic antibiotics. Twenty-one patients had follow-up available (median time of follow-up 15 months), whereas seven individuals were lost to follow-up. Of those 21 individuals, 43% (9/21) showed scarring at least at one site of previous Mpox lesions.

#### Conclusion:

Our study provides clinically relevant new data on the long-term lesional outcome following Mpox and thereby offers insights on late sequelae. Almost half of all patients experienced residual scar formation. This underlines the importance of further improving prevention strategies to contain the epidemic.



**Abstract N°: 104****Chronic Co-infection: An in-depth case study of prolonged Mpox in an HIV/AIDS patient**

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**Introduction & Objectives:**

In the year 2022, a rapid increase in cases of Mpox virus infection occurred, with the most affected population being men who have sex with men (MSM), among whom a high percentage are HIV-positive. (1,3) This has sparked interest in a potential relationship between HIV and the severity of Mpox clinical presentation. (4) The duration of the disease in patients with severe immunocompromise remains a widely debated topic, but there is evidence indicating that a low CD4 lymphocyte count is the main risk factor for a prolonged infection. (8) We present the case of an HIV-positive patient with severe immunosuppression due to antiretroviral therapy (ART) refractoriness, exhibiting a prolonged clinical course of Mpox.

**Materials & Methods:****Results:**

Case Description: A 29-year-old male patient with a history of HIV/AIDS, member of an indigenous community that have long lived in the jungle, presented with a 6-month history of macules, papules, and vesicles that initially appeared on the right upper extremity, subsequently extending, increasing in size, and ulcerating. He reported a history of Mpox infection 4 months prior. During his course, he received treatment for syphilis and was administered a broad-spectrum antifungal due to suspected disseminated mycosis; however, there was progression of skin and mucosal lesions, which became deformative. Serial skin biopsies indicated viral cytopathic changes, and 11 months after the initial diagnosis, a new Mpox PCR yielded a positive result, indicative of uncontrolled active viral replication attributed to the lack of cellular response in the patient. He experienced multiple serious infectious complications throughout his prolonged hospitalization, which were promptly managed.

**Conclusion:**

Mpox virus infection is generally self-limiting; however, the scenario changes in the context of severe immunosuppression, such as that associated with HIV. (6) While Hoffmann et al. find no significant differences in hospitalizations or complications in well-controlled HIV patients, Mitja et al.'s study reveals increased mortality in those with CD4 counts <200 cells/mm<sup>3</sup>, and prolonged duration in those with CD4 counts <100 cells/mm<sup>3</sup>. (9) The presented case illustrates uncontrolled viral replication in an HIV patient, underscoring the importance of interdisciplinary management to enhance immunological response and minimize sequelae.



**Abstract N°: 209****Frequency of condylomatosis and inflammatory processes of the cervix in pregnant women**

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**Introduction & Objectives:** One of the most relevant areas in the study of clinical manifestations of human papillomavirus infection (HPV) is genital warts (GW). Many researchers have already classified condylomas as background diseases of the genitals, since they can precede neoplasms in the genital area. According to the literature, the frequency of detection of oncogenic types of HPV in pregnant women with GW is 20-30% higher than that among non-pregnant women. Changes in the structure of the mucous membrane of the urogenital tract of pregnant women, occurring under the influence of changing hormonal levels, contribute not only to microbial colonization of the genitals, but also to proliferative changes in the epithelium of the vagina, vulva and cervix. In this regard, when HPV enters or activates in the body of pregnant women, the risk of dysplastic changes in the cervix increases. Data on the frequency of changes in the cervix with GW genitalia in pregnant women are scarce and require further study. In this connection, the purpose of this study was to characterize cervical lesions in pregnant women with GW.

**Materials & Methods:** We observed 33 pregnant women at various stages, aged from 18 to 36 years, with primary and recurrent episodes of GW. In addition to routine screening examinations for the most common STIs and HPV using the PCR method, colposcopy and cytological examination were carried out.

**Results:** Among the observed pregnant women, there were 24 primigravidas and 9 multigravidas. The primary episode of GW occurred mainly among primigravidas. Recurrent forms of GW were also found mainly in primigravidas. Relapses of GW occurred mainly in those patients who underwent only destruction (cryodestruction, coagulation destruction) without additional antiviral therapy. Also, patients with recurrent forms of GW were not examined for concomitant infections of the urogenital tract, while many had abundant milky-white and purulent discharge from the genital tract. The frequency of involvement of the cervix in the inflammatory and condylomatous process was 23 (69.7%), with the phenomena of condylomatosis and polyps occurring in 11 (33.3%) patients, and inflammatory (endocervicitis, Nabothian cysts) and erosive manifestations (erosions and ectopia) in 12 (36.4%). There were 10 patients (30.3%) without involvement of the cervix in the pathological process. Identification of concomitant sexually transmitted infections (STIs) of the “new generation” (ureaplasmosis, chlamydia, herpes virus types 1 and 2, HPV 16/18, 6,11) occurred mainly among patients with involvement in the pathological process cervix, noted in 17 (51.5%). In the subgroup of patients without cervical lesions, *Gardnerella vaginalis* 5 (15.2%) and *Candida albicans* – 18 (54.5%) were found predominantly.

**Conclusion:** Thus, in pregnant patients with genital GW, cervical condylomatosis was observed in 11 (33.3%), and inflammatory processes of the cervix in 12 (36.4%), which makes it possible to classify this contingent of pregnant women not only in the category of risk of gravid disorders and subsequent infection of the fetus due to the presence of “new generation” STIs, but also the risk of developing background and dysplastic processes of the cervix in the future.





**Abstract N°: 664****Beyond genital screening: the role of extragenital testing for *Chlamydia trachomatis* in women**Clara Valente<sup>1</sup>, Rita Corte-Real<sup>1</sup>, Ana Luísa João<sup>1</sup>, José Neves<sup>1</sup>, Cândida Fernandes<sup>1</sup><sup>1</sup>Hospital Santo António dos Capuchos, Lisboa, Portugal**Introduction & Objectives:**

*Chlamydia trachomatis* (CT) extragenital infections in the anorectal and oropharyngeal mucosa are often asymptomatic and underdiagnosed, particularly in women. Current guidelines advocate extragenital screening for men who have sex with men, but in women, such screenings are less studied and rely on clinical risk assessment.

**Materials & Methods:**

We conducted a six-year observational, retrospective study at a free-of-charge walk-in Sexually Transmitted Infections (STI) clinic in Portugal. Our goal was to assess the prevalence of extragenital CT infections and the percentage of infections that could go undetected if testing were limited to urogenital sites. We included all women who collected urogenital (urine/vaginal swabs), anorectal, or oropharyngeal samples for CT testing via Nucleic Acid Amplification Tests. Screening decisions were based on clinicians' individual risk assessment.

**Results:**

2783 specimens were collected from 1914 patients. 232(12.1%) patients tested positive for CT in at least one location. Positivity rates were 11.8% (219/1851) for urogenital location, 12.6% (22/174) for anorectal and 2.2% (17/758) for oropharyngeal. Most extragenital infections were paired with a positive urogenital test. However, 22.7% (5/22) of women with a positive anorectal CT swab and 29.4% (5/17) with a positive oropharyngeal CT test had a negative urogenital sample. Irregular condom use and concurrent HIV infection statistically correlated with positive extragenital CT infections ( $p < 0.05$ ).

**Conclusion:**

Extragenital CT testing is crucial in transmission control and treatment decisions. Women are disproportionately affected by genital CT infections, with untreated infections potentially leading to inflammatory pelvic disease and infertility. In comparison, untreated extragenital infections have lower morbidity, with proctitis or pharyngitis as possible outcomes. Nevertheless, rectal sites can act as a reservoir for genital contamination, so a balance between over-testing, which can have a significant economic impact on health systems, and the risk of missing some extragenital CT infections is required.

Our study showed a 12.6% prevalence of anorectal CT infection, aligning with other studies, while oropharyngeal testing had a lower prevalence (2.2%). If only urogenital CT testing had been performed, ten extragenital infections would not have been diagnosed. This represents 4.3% of the diagnosed infections in the study period and 1.8% of the patients tested in extragenital locations.

Limitations of our study include its single-center, retrospective nature, and selective testing based on clinical judgment, potentially affecting generalizability.

In conclusion, we found a prevalence of 12.6% anorectal CT infection and a 2.2% oropharyngeal infection. Extragenital testing identified CT infections in an additional 1.8% of the women tested. Considering the low prevalence of missing oropharyngeal infections and their low morbidity, routine testing in this site may not be

justified. In contrast, the higher prevalence of anorectal CT suggests screening based on clinical judgment. Further cost-effectiveness research is necessary to refine guidelines for the female population.

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**Abstract N°: 822****PENILE LICHEN PLANUS IN A FILIPINO MALE HIV PATIENT TREATED WITH 308-nm UVB EXCIMER**Emmerson Gale Vista<sup>1</sup>, Daniel Brian Cabugao\*<sup>1</sup><sup>1</sup>Research Institute for Tropical Medicine, Dermatology, Muntinlupa, Philippines**Introduction & Objectives:**

Lichen planus, commonly seen in HIV patients, is clinically correlated with the patient's low CD4 count (201-500 cells/u). Ten percent of LP can manifest as solitary or multiple asymptomatic annular erythematous, violaceous, or hypopigmented papules that spontaneously coalesce into plaques enlarging centrifugally with a central clearing in the oral or genital mucosa as non-infectious dermatosis in HIV-infected individuals. Our case is a thirty-year-old HIV-positive male who presented with a six-month history of solitary asymptomatic hypopigmented macule spontaneously evolving to multiple hypopigmented asymptomatic plaques on the penile shaft. Ancillary laboratories requested revealed sections of hyperkeratosis, wedge-shaped hypergranulosis, and marked psoriasiform epidermal hyperplasia with dyskeratotic cells and dermal inflammatory infiltrate of lymphocytes with pigment incontinence which were consistent with lichen planus.

**Materials & Methods:**

A 308 nm-excimer photolamp was used and the patient was treated once a week over a total treatment period of 28 weeks (28 treatment sessions). Since data regarding the genital lesions to UVB were lacking, the initial session was started with low dose of 50 mJ/cm<sup>2</sup>, and was increased to 100 mJ/cm<sup>2</sup> and maintained for the entire treatment course.

**Results:**

Despite first-line treatment with topical corticosteroid and topical calcineurin inhibitors, minimal improvement was seen. With this alternative approach, a once-a-week regimen, complete clearance of genital lesions was noted after 28 weeks of treatment.

**Conclusion:**

Targeted narrowband has an important role in managing penile lichen planus, particularly where there is no definitive alternative management approach. Development of the treatment protocol is to be considered to standardize the approach to this subtype as an alternative option to topical medications.



**Abstract N°: 944****syphilis pustulosa : a male patient with multiple, sensitive, purulent nodules on the face**Yurdanur Duran<sup>1</sup>, Zülküf Arslan<sup>1</sup><sup>1</sup>Ankara Eğitim ve Araştırma Hastanesi, Zekai Tahir Burak Ek Binası, dermatology, ankara, Türkiye

**Introduction & Objectives:** Syphilis is a sexually transmitted disease caused by *Treponema pallidum*. Secondary syphilis lesions appear within 3-6 weeks after chancre and on average up to 6 months after general exposure. The most common skin lesions of secondary syphilis are erythematous macules and maculopapular lesions. Lichenoid, nodular, follicular, pustular, and frambesiform lesions are rarer presentations of secondary syphilis. Here we present a rare case of syphilis pustulosa.

**Materials & Methods:** A 48-year-old male patient applied to our clinic with complaints of painful, infiltrative, verrucous secondary infected-looking nodules and arcuate-shaped plaque lesions on both sides of the face, which started 10 days ago, and did not respond to oral antibiotics. No additional lesion was detected in the physical examination. Laboratory values were as follows ;WBC  $12.66 \times 10^9$ , CRP 14.7, T.pallidum IgM + IgG : 33.91 S/CO ve VDRL : 1/128 found positive. In histopathology, hematoxylin and eosin staining revealed mononuclear cell accumulation in the dermis with dense perivascular and periadnexal distribution.

**Results:** The diagnosis was made as syphilis pustulosa based on relevant laboratory and histopathological findings. Our patient was injected with two doses of 2.4 U benzathine penicillin G, one week apart. At the 1-month follow-up, it was observed that the lesions were in the form of postlesional pigmentation.

**Conclusion:** Syphilis pustulosa is a rare variant usually seen in HIV-positive or malnourished patients. Pustules may be accompanied by systemic symptoms such as headache, fatigue, and high fever. We presented this case to draw attention to the rare variants of syphilis, which is a public health problem, in patients with no history of suspicious sexual intercourse and unreliable anamnesis





## Abstract N°: 1041

### **Peculiarities of the local microbiocenosis in patients with inflammatory process in organs of the urogenital tract in Ukraine**

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**Introduction & Objectives:** Infectious-inflammatory diseases of the female and male genitourinary system, caused by various sexually transmitted pathogens and/or non-specific microflora, are a serious medical and social problem, especially for people of reproductive age. In recent years, there has been an increase in the frequency of violations of the microbiocenosis of the urogenital tract, as well as an increase in the number of cases of unsuccessful treatment, which is associated with various factors.

The aim of this study was to investigate the microbiocenosis of the genitourinary tract in patients with signs of sexually transmitted infections (STIs).

**Materials & Methods:** In this retrospective study, data was collected for all patients with signs of an inflammatory process of the urogenital tract, who applied the outpatient department or were undergoing inpatient treatment from January 2023 and November 2023 in the STI department of Tertiary Health Institution. Patients underwent clinical, bacterioscopic, bacteriological, biochemical, and immunological examinations. Scrapings from genitourinary organs, as well as blood serum, were used as research material. When studying the microflora of the lower parts of the genitourinary system, the following were taken into account: general bacterial insemination, the presence of gram-positive cocci of the families Micrococcaceae, Staphylococcaceae and Streptococcaceae, corynebacteria and gram-negative microorganisms of the families Enterobacteriaceae, Pseudomonadaceae.

**Results:** 351 patients, including 178 men (average age  $37.4 \pm 16.5$  years) and 173 women (average age  $33.9 \pm 18.5$  years) were included. Gonorrhea infection and syphilis were excluded in all patients.

Urethritis was the most common clinical manifestation among men (90.5%). Prostatitis occurred in 4.0% of cases. Urogenital trichomoniasis as a mono-infection was in 35.5% of cases; 14.0% of patients had opportunistic microflora in combination with trichomoniasis. Ch. trachomatis was detected as a mono-infection in 42.5% of patients and as combination with trichomoniasis in 8% of cases.

The most common clinical manifestations of STIs in women were endocervicitis (95.4%), and colpitis (4.0%). Urogenital trichomoniasis as a mono-infection among women - in 45.5% of cases and 18.0% of women had combination with opportunistic microflora. Trichomonad-chlamydia infection was the second most common (22.0%). 18 laboratory strains of the Staphylococci genus were isolated from patients (13 from men and 5 from women). *S. haemolyticus* and *S. epidermidis* were the most common among men and women (44.4% and 16.7%, respectively). The second position was occupied by representatives of the Enterobacteriaceae family (21 strains - 9 from men and 12 from women). *E. coli* strains were identified among both men and women (44.4% and 58.3%, respectively). The number of *Klebsiella pneumoniae* was higher in female (25.0%) than in male patients (18.2%).

**Conclusion:** T. vaginalis infection is dominant among people of reproductive age and more common in women than in men (63.5% and 49.5%, respectively), which may be related to anatomical and physiological features of the female body. The present of the above uropathogens in patients can complicate the course of the disease, lead to failures in treatment, the development of a state of resistance, so this fact must be taken into account in the assigning treatment.

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**Abstract N°: 1206****Top dermatoses reported to the FDA after use of four popular antiretrovirals in the treatment of HIV**Bianca Ituarte\*<sup>1</sup>, Mitchell Taylor<sup>1</sup>, Jennifer Adams<sup>1</sup><sup>1</sup>University of Nebraska Medical Center, Dermatology, Omaha, United States

**Introduction & Objectives:** The use of antiretroviral therapy to treat and prevent initial transmission of Human Immunodeficiency Virus (HIV) has revolutionized care for patients. With the explosion in discovery of novel agents, patients now have access to a wide variety of safe options for their treatment regimen. Thirty-million people living with HIV globally use antiretroviral therapy, and large-scale understandings of patterns in adverse dermatoses following medication use are unknown. This study seeks to establish patterns in dermatologic adverse events reported to the United States Food and Drug Administration after use of commonly prescribed combination antiretroviral therapies.

**Materials & Methods:** The FDA Adverse Event Reporting Database (FAERS) was queried for all reports of skin and subcutaneous-specific incidents among four commonly prescribed antiretrovirals used to treat and prevent transmission of HIV. These medications, (bictegravir/emtricitabine/tenofovir alafenamide), (cobicistat/elvitegravir/emtricitabine/tenofovir alafenamide), (abacavir sulfate/dolutegravir sodium/lamivudine) and (emtricitabine/tenofovir disoproxil fumarate), were searched as both trade and generic names to fully capture all available reports from database inception through 12/31/2023. Frequencies of each cutaneous reaction were recorded and pooled for descriptive analysis.

**Results:** Of the total 55,009 reports among these antiretrovirals, 2,634 (4.8%) were localized to the skin and subcutaneous tissue. The majority of reports were from healthcare professionals (75.6%) and involved male patients (62.5%). Skin-specific cases peaked in 2019 at 400, mirroring the overall trend of growth in recent years. **(Figure 1)** The most reported adverse events included “rash” (n = 772, 23.9%), “pruritus” (n = 390, 14.8%), “alopecia” (n = 188, 7.1%), and “lipodystrophy acquired” (n = 157, 6.0%). The adverse events with over 100 combined reports among all four medications can be seen in **(Figure 2)**, as percentages of the overall skin and subcutaneous cohort. Dermatologic emergencies such as Stevens Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN) were reported 61 and 16 times, respectively.

**Conclusion:** While the nature of the unverified data reporting cannot definitively determine prevalence, this study reports emerging patterns in dermatologic conditions secondary to use of antiretroviral therapy. This data can help inform patient-prescriber discussions regarding potential adverse events upon which they can prophylactically provide patient counseling and guidance.



**Abstract N°: 1279****Lues Maligna, Ocular and Neurosyphilis in an HIV-Filipino Male**Daniel Brian Cabugao\*<sup>1</sup>, Johannes Dayrit<sup>1</sup><sup>1</sup>Philippines, Dermatology, Muntinlupa, Philippines**Introduction & Objectives:**

Lues maligna (LM), also called as ulceronodular or malignant syphilis, is an atypical dermatologic manifestation caused by the commonly sexually transmitted bacteria, *Treponema pallidum*. Numerous cases have been observed in immunocompromised patients, particularly in men and or PLHIV. A 45-year-old man presented with a 1 year-history of erythematous plaques involving the scalp, trunk and extremities. He was initially diagnosed with Pdoriasis and was advised additional workup and topical medications but was non-compliant and was lost to follow-up. His skin lesions persisted with progressive blurring of vision; consulted with an ophthalmologist where FTA-ABS was requested with a positive result. Dermatologic examination revealed multiple generalized well-defined erythematous scaly ulcerated plaques and patches of varying sizes which involved the face, trunk and extremities.

**Materials & Methods:**

The patient was admitted for further investigation and was started on aqueous Penicillin G 4 MU IV infusion every 4 hours for 14 days.\*\*

**Results:**

Additional laboratory work-up revealed HIV-rapid antigen test positive, RPR reactivity noted at 1:512 and TPPA of more than 1:20,480 dilution while cryptococcal antigen test, lumbar tap and cranial CT-scan with contrast revealed no significant results. Histopathology examination revealed psoriasiform hyperplasia of the epidermis with a dense band-like inflammatory infiltrate of lymphocytes and numerous plasma cells through the upper dermis, all consistent with syphilis. The final diagnosis was malignant lues with ocular syphilis with concomitant HIV infection.

**Conclusion:**

We report a rare case of lues maligna and ocular syphilis manifesting before a diagnosis of HIV infection. Although uncommon, lesions presenting as widespread round to irregularly shaped erythematous ulcerated plaques, papules, and nodules with scales should be evaluated and malignant lues should be considered, with or without HIV risk. Early serologic testing, together with clinical findings and dermatopathology sampling, may be helpful for a timely diagnosis and management of these cases.



**Abstract N°: 1581****Unusual Presentations of Sexually Transmitted Infections in HIV infection: A case series**Vikash Paudel<sup>\*1</sup>, Deepa Chuda<sup>2</sup><sup>1</sup>Patan Academy of Health Sciences, Department of Dermatology, Lalitpur, Nepal, <sup>2</sup>Nepal Police Hospital, Department of Obstetrics and Gynecology, Kathmandu, Nepal**Introduction & Objectives:**

Human Immunodeficiency Virus (HIV) infection is a global health concern with varied clinical presentations. Concurrently, sexually transmitted infections (STIs) often accompany HIV, manifesting differently in individuals with the virus. Understanding the atypical presentations is vital for timely diagnosis and management, yet literature on the topic is limited, particularly in high-prevalence regions. This case series aims to fill this gap by documenting unusual STI presentations in HIV-positive individuals, emphasizing the need for heightened clinical awareness, comprehensive screening, and multidisciplinary approaches to improve patient outcomes and public health efforts.

**Materials & Methods:**

This is a retrospective case series involving the analysis of medical records of clients diagnosed with HIV/AIDS and sexually transmitted infections (STIs).

**Results:**

This case series explores unusual manifestations of HIV/AIDS and sexually transmitted infections (STIs), presenting four distinct cases diverging from typical symptomatology. The cases encompass molluscum contagiosum, persistent urethral discharge from gonorrhea, perianal condyloma accuminata, and genital ulcer from syphilis. Across different age groups, these cases reveal atypical presentations of HIV/AIDS and STIs. Case 1 involves a 21-year-old male exhibiting recalcitrant molluscum contagiosum on the face, linking dermatological manifestations with HIV/AIDS. Case 2 underscores considering HIV/AIDS in older individuals, with a 60-year-old man presenting perianal condyloma accuminata. Case 3 demonstrates atypical syphilis presentations alongside HIV/AIDS in a 30-year-old man with a painless genital ulcer. Case 4 highlights dual diagnoses of syphilis and HIV/AIDS in a 25-year-old male with persistent urethral discharge despite initial negative STI results.

**Conclusion:**

These cases underscore the importance of heightened clinical awareness, comprehensive screening, and timely management to address the intricate relationship between HIV/AIDS and STIs across demographics. They stress the significance of maintaining a high suspicion for HIV/AIDS, even with atypical clinical presentations, advocating for early diagnosis, intervention, and transmission prevention. The series offers insights into diverse clinical scenarios at the HIV/AIDS-STI intersection, advocating for ongoing research, health education, and awareness campaigns to enhance healthcare providers' abilities and improve client outcomes.



## Abstract N°: 1624

### The Renaissance of Syphilis in Western India: A growing concern

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#### Introduction & Objectives:

Syphilis can present clinically in various stages, however diagnosis of latent stage rests on positive serology. Recently, a reemergence of syphilis has been noted, especially in India, USA, Australia and Canada with regional variations. Rising trend of syphilis and scarcity of data from this part of India has encouraged our study. The objective was to analyze the current status of acquired syphilis in a tertiary care center.

#### Materials & Methods:

This is a retrospective analysis of all patients of acquired syphilis who attended the sexually transmitted infections (STI) clinic during January 2021 to December 2023 in a tertiary care centre. Those who were detected with syphilis during routine screening in HIV seropositive patients, pregnant women and patients admitted in other wards, were also included. Demographic details, clinical profile, sexual behavior, concomitant STIs and serological tests (VDRL, TPHA and HIV) were scrutinized. Only confirmed cases of syphilis were included. Data was recorded in excel sheet, statistically analyzed and compared with the yearly incidence rates of syphilis in our institute from 2016-2020.

#### Results:

A total of 1984 patients attended the STI clinic during the study period and 536 of them were diagnosed with an STI. Syphilis was detected in 13.8% (n=74), out of which, 74.3% (n=55) were male and 25.7% (n=19) were female. Majority of the patients were young adults, with a mean age of 32 years. Men who have sex with men (MSMs) comprised 27.3% (n=15). Those who were detected in the latent stage were 46% (n=34). Of the 43.2% (n=32) in the secondary stage and 10.8% (n=8) in the primary stage, the most common presentations were an asymptomatic rash and a single chancre, respectively. Patients with co-infections were 13.5% (n=10), of which genital herpes was the most common. The annual incidence rates of syphilis out of the total STIs were 12.3%, 13.4% and 15.1% during the years 2021, 2022 and 2023, respectively [Table 1]. These rates were compared with our records of the annual incidence from 2016-2020 [Figure 1].

#### Conclusion:

A persistent linear rise in annual incidence of syphilis, is a worrisome finding. The significant number of MSMs, may indicate a change in sexual behavioral patterns in the post-COVID lockdown era, necessitating targeted control strategies. The fear of getting tested and rampant use of broad-spectrum antibiotics suppressing the early symptoms, may explain the alarming rise in latent syphilis, in our study. This has led to underdiagnosis and delay in treatment allowing for uninterrupted transmission. The hidden epidemic potential of syphilis in our region has been unraveled, warranting a more inclusive screening criteria and an increased awareness among the masses.

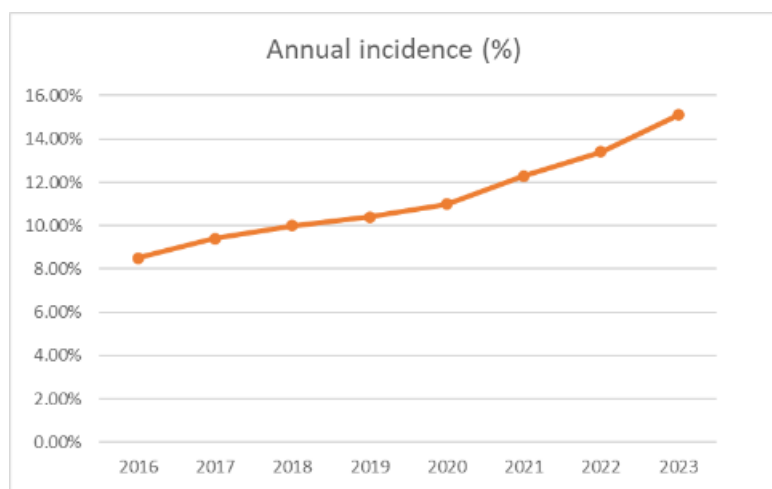
Limitations: Single-centre study, exclusion of congenital syphilis patients and probable under-reporting of cases during COVID.

**Table 1:** Annual incidence of syphilis.

Year	Total STI cases	Number of syphilis cases	Percentage of total
2016	152	13	8.5
2017	160	15	9.4
2018	170	17	10
2019	182	19	10.4
2020	109	12	11
2021	130	16	12.3
2022	194	26	13.4
2023	212	32	15.1
<b>TOTAL</b>	<b>1309</b>	<b>150</b>	<b>11.5</b>

STI = Sexually Transmitted Infections

**Figure 1:** Comparison of annual incidence rates of syphilis.





## Abstract N°: 1755

### Prevalence of syphilis, human papillomavirus, gonorrhea and chlamydia in transgender women in Colombia

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#### Introduction & Objectives:

Transgender women (TGW) have been identified as a key at-risk population for HIV and other sexually transmitted infections. Previous studies in Colombia have shown a prevalence of HIV in TGW ranging from 18% to 29%; however, the prevalence of other sexually transmitted infections is unknown. Due to social exclusion and economic marginalization, TGW are a hard to reach population. We performed a respondent-driven sampling study to assess the prevalence of syphilis, human papillomavirus (HPV), *Neisseria gonorrhoea* (NG) and *Chlamydia trachomatis* (CT)\* in TGW in a Colombian city.

#### Materials & Methods:

Eight TGW seeds were identified from the community to start recruitment, with a maximum of two referrals allowed per participant. A sociodemographic and behavioral survey was performed followed by a targeted physical examination. Serum was collected and tested for syphilis with a Rapid Plasma Reagin (RPR) and a treponemal Enzyme Linked Immunosorbent Assay (ELISA). Oropharyngeal and anorectal swabs were collected, pooled and tested with two commercial nucleic acid amplification tests, one for HPV and another for NG and CT. We classified syphilis infection as 'likely active' if both the RPR and ELISA were reactive, and 'likely past infection' if only the ELISA was positive. Data were collected in Redcap, and the analysis was performed using R. Point estimates of demographic and behavioral and test results measures were adjusted for individual network degree using the RDS-II method.

#### Results:

From May to October 2023, a total of 169 TGW participated in the study. The median age of participants was 41, with 32% having completed at least high school education and only 8.5% reporting full time employment. Approximately half of the participants reported onset of sexual activity before age 14, with 52% disclosing a history of sexual abuse. Furthermore, only 14% reported never having engaged in commercial sex work. The molecular tests revealed the presence of HPV, NG and CT in 38%, 15% and 15% of TGW, respectively. Serological testing was positive for the treponemal ELISA in 70% of participants, and the RPR test was reactive in 36%. Adjusted prevalences were estimated at 41.7% (95%CI 27.5–55.8) for HPV, 17.6% (95%CI 3.7–31.5) for NG, 14.0%



(95%CI 4.7-23.3) for CT, 27.8% for likely active syphilis (95%CI 17.4-38.1) and 36.7% (95%CI 24.6-49.2) for likely past syphilis. Data convergence was achieved on both demographic and STI metrics with no evidence of homophily detected.

### **Conclusion:**

In Colombia, while the prevalence of HPV in the general population remains unknown, the prevalence of active syphilis, NG and CT have been estimated at 1.3%, 0.65% and 8%, respectively. Therefore, our results underscore the disproportionate burden of STIs in TGW in Colombia, despite universal healthcare coverage. These results highlight systemic shortcomings within the healthcare system, indicating a failure to provide adequate care to diverse populations. Urgent action is needed to develop tailored strategies aimed at addressing the specific healthcare needs of TGW communities, thereby ensuring equitable access to quality healthcare services.

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**Abstract N°: 1965****Atypical Molluscum Contagiosum Mimicking Cutaneous Warts in an HIV Patient**

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**Introduction & Objectives:**

Molluscum contagiosum (MC) is characterized clinically by small, dome-shaped, pearly-white to skin-colored papules and a self-limiting course. However, MC can present with several atypical morphologies mimicking other dermatoses, especially in immunocompromised patients. The lesions are usually extensive and cause disfigurement when associated with HIV. Agminated MC refers to the close clustering of several lesions of MC. The aim of this case report is to report the agminated MC mimicking a cutaneous wart in an HIV patient.

**Materials & Methods:****Observations:**

A 36-year-old married woman with HIV complained of multiple red bumps that were initially pea-sized and gradually increased in size and number. The lesion spread over the face, armpits, hands, thighs, genital area, and feet for 9 months. History of indurated, painless, and ulcerative chancre was denied. There was no history of blood transfusion, trauma, or any drug intake before the appearance of these lesions. There were no such lesions present on her husband. There was no history regarding the HIV status of the husband. Physical examination showed variation in the lesion with typical central umbilicated dome-shape nodules, but some appeared as large coalescing nodules with a smooth and rounded surface. The acetowhite test was negative. Her CD4 absolute count was 61 cells/mm and serological testing for syphilis was non-reactive. Dermoscopy revealed a polylobular, pinkish-white, amorphous structure in the center with a surrounding crown of vessels that did not cross the center of the lobules. Histopathological examination showed large intracytoplasmic eosinophilic inclusions in keratinocytes, pushing the nucleus to the periphery. Based on the above findings, the patient was diagnosed with atypical MC and planned to have wide excision surgery in collaboration with the surgery department.

**Conclusion:**

Awareness among clinicians regarding the atypical presentations of MC is imperative for the early diagnosis and management of this infectious condition. Rarely, atypical presentations of MC have been described in immunocompromised patients. Histopathological examination is needed to determine the diagnosis of these atypical MC.





**Abstract N°: 2178**

**Time to treatment as a key parameter for the control of syphilis transmission in people living with HIV**

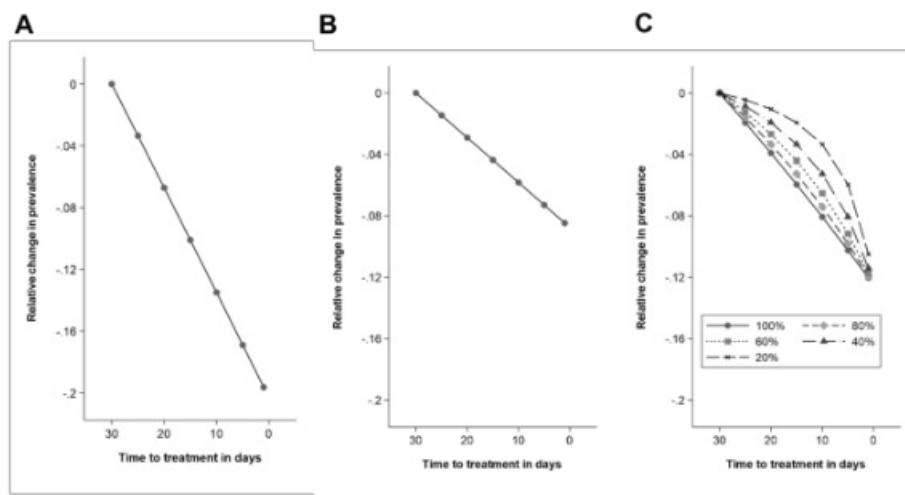
Jonny Alejandro Garcia Luna<sup>\*1, 2, 3</sup>, Neal Alexander<sup>1, 2</sup>, Norman Danilo Maldonado<sup>4</sup>, Kelly L. Hawley<sup>5, 6, 7, 8, 8</sup>, Justin D. Radolf<sup>5, 6, 7, 9, 10</sup>, A. David Paltiel<sup>11, 12</sup>

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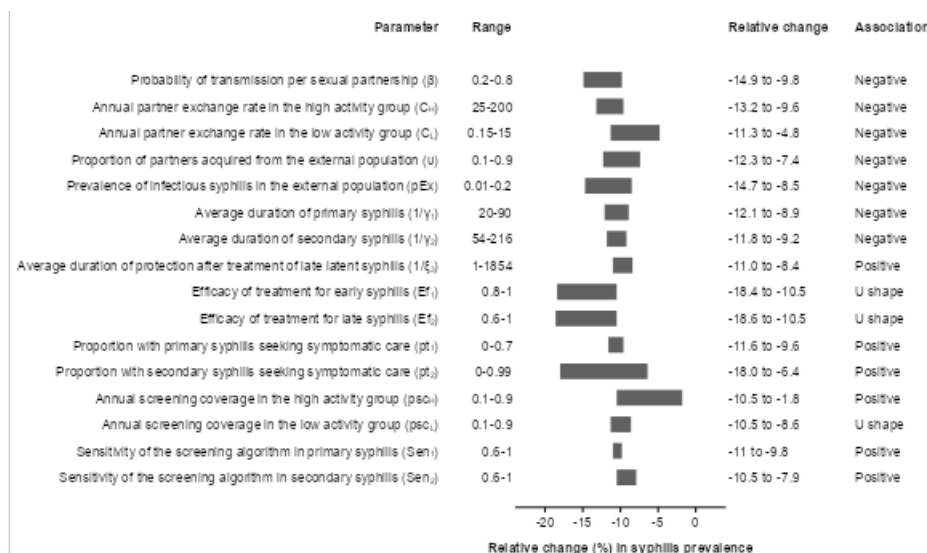
**Introduction & Objectives:** The resurgence of syphilis poses a pressing public health challenge, particularly impacting people living with HIV and gender/sexual minorities. The use of mathematical models is instrumental in understanding the potential impact of public health interventions on epidemic dynamics. Past modeling studies assuming immediate treatment post screening have suggested that frequent screening may be an effective approach for control of syphilis. We hypothesize that time to treatment is a key parameter for syphilis control and assessed the effect of shorter times to treatment on long term syphilis prevalence.

**Materials & Methods:** We constructed a compartmental model to depict the transmission of syphilis among people living with HIV. The natural history of syphilis included the following states: susceptible (S), incubating (E), primary (I1), secondary (I2), early latent (L1) and late latent (L2) syphilis. Additionally, we included four compartments for individuals screened and awaiting treatment (I1s, I2s, L1s and L2s). Individuals with syphilis transitioned to the treated compartments through screening, symptomatic care-seeking, or incidental antibiotic treatment. Treated individuals were considered protected from reinfection and remained in a protected treatment state (T1, T2 and T3) for varying periods of time depending on the stage at treatment. We stratified the population to high (90%) and low activity (10%) groups with distinct partner acquisition rates and assumed proportional and homogenous mixing within the population. Furthermore, we included an additional syphilis acquisition rate to accommodate subjects mixing with individuals not living with HIV. We simulated 100,000 PLWH for 100 years and estimated the steady state prevalence of syphilis for different lengths of time to treatment. We also conducted sensitivity analysis to assess the effect of different model parameters on the potential impact of reducing time to treatment.

**Results:** There was a linear relationship between shorter time to treatment and reduced, steady-state syphilis prevalence (Figure 1) For instance, when the average time to treatment was reduced to one day in the entire population, the prevalence dropped from 8.1% in the base scenario to 6.5% (19.5% reduction). Notably, substantial relative reductions of approximately 10.5% were attainable when 20-100% of the high-activity group had a shorter time to treatment (Figure 1C). Sensitivity analysis revealed that reducing time to treatment in 20% of the high activity group was consistently associated with reduced steady-state prevalence with relative reductions ranging from -1.8% to -18.6% (Figure 2). Some of the key parameters that impacted the effect of reducing time to treatment were the transmission parameters, the annual screening coverage and the sensitivity of the screening algorithm (Figure 2).



**Figure 1.** Estimated relative change of syphilis prevalence under different assumptions for time to treatment delays post screening. A. Shows a linear decrease in prevalence associated with shorter time to treatment with a shorter time to treatment in the whole population. B. Shows a smaller decrease when the shorter time to treatment occurs in only the low-risk group. C Shows the estimated decrease in prevalence associated with the shorter time to treatment in different proportions of the high activity group.



**Figure 2.** Relative change on syphilis prevalence of reducing time to treatment from 30 to 1 days in 20% of the high risk group, under different values of model parameters.

**Conclusion:** Overall, the findings underscore the potential benefits of reducing time to treatment in reducing syphilis prevalence, particularly when targeting high-activity groups. Our findings also highlight the complex interplay of numerous factors in determining the effectiveness of such interventions.





**Abstract N°: 2300**

**Incidence, Characteristics and Predictors for Sexually Transmitted Infections among Austrian Users of HIV Pre-Exposure Prophylaxis**

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**Introduction & Objectives:**

HIV Pre-Exposure Prophylaxis (PrEP) has been recommended for individuals at increased risk of HIV. While PrEP is highly effective in preventing HIV transmission, it provides no protection against other sexually transmitted infections (STIs). In the last decade, a surge of STIs has been observed, mainly driven by a rising incidence among men who have sex with men (MSM). Importantly, recent reports suggested that most STIs occur within a small number of individuals. Such information can guide prevention strategies targeting this subpopulation, yet, no information for Austria is available. We thus aimed to investigate the incidence of bacterial STIs in Austrian PrEP users and assess factors associated with STI recurrence.

**Materials & Methods:**

The Vienna HIV Infection Via Sex Study (HIVEX) is a prospective observational cohort study initiated in June 2020 at the General Hospital of Vienna and comprises Viennese PrEP users. Per-protocol, individuals were tested for STIs quarterly and sexual behavior was documented using a questionnaire.

**Results:**

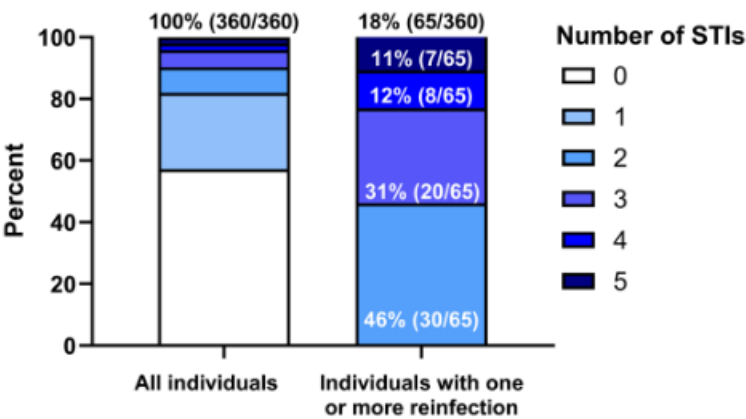
Between 06/2020 and 12/2023, 360 individuals were enrolled. The median age was 31.2 years and 359 (99%) identified as MSM, whereas one transgender woman was included. Longitudinal data was available for 263 participants comprising 379 person-years. In this period, 276 STIs were detected in 154 individuals, of which 23% (36/154) experienced symptoms at diagnosis. The incidences of gonorrhea, chlamydia and syphilis were 29.9 (95% CI: 24.3–35.3), 22.7 (95% CI: 17.9–27.5) and 9.8 (95% CI: 6.6–12.9) infections per 100 person-years, respectively. Extra genital disease (i.e. anal or pharyngeal) accounted for 95% (97/102) of gonorrhea and 81% (65/80) of chlamydia cases. No HIV- or hepatitis C virus infections were detected. Notably, individuals with one or more reinfections (18%; 65/360) comprised 68% (187/276) of all STIs. Engaging in sexualized drug use was reported by 44% (157/360) during the study period and was associated with testing positive for gonorrhea (38% vs. 21%,  $p < 0.001$ ) and syphilis (17% vs. 5%,  $p < 0.001$ ), but not chlamydia (26% vs. 19%,  $p = 0.118$ ). A binary logistic regression model was established to identify predictors for STI reinfection, and in multivariate analysis, sexualized drug use was found as the only predictor (adjusted odds ratio: 3.31 [95% CI: 1.67–6.65];  $p < 0.001$ ).

**Conclusion:**

During the observational period, forty-three percent of all participants were affected by gonorrhea, chlamydia and/or syphilis at least once. The majority of infections occurred extragenitally and were asymptomatic.

Furthermore, two-thirds of all STIs were attributed to 18% of PrEP users experiencing multiple infections. The only independent predictor for STI reinfection was ‘sexualized drug use’, which highlights the potential benefits of harm reduction interventions in combating STIs.

Figure.



The left box displays the entire study population stratified by the number of sexually transmitted infections whereas the right box provides a detailed view on those affected by one or more reinfection during follow-up. Notably, the cumulative number of STIs was 276, yet, individuals with one or more reinfection (18% (65/360)) accounted for 68% (187/276) of them.







Abstract N°: 2338

**Childhood Phthiriasis palpebrarum – two cases successfully treated with systemic ivermectin**Jelena Nojner<sup>1</sup>, Maja Tomović<sup>1</sup>, Olivera Drulović<sup>1</sup>, Margita Mijušković<sup>1</sup><sup>1</sup>Clinic of Dermatovenereology, University Clinical Center of Serbia, Belgrade, Serbia

**Introduction:** Phthiriasis palpebrarum (PP), sometimes referred to as phthiriasis ciliaris is a rare manifestation of eyelash infestation caused by *Phthirus pubis*, an obligate blood-feeding ectoparasite of humans, usually transmitted by sexual intercourse, close body contact, or indirectly through fomites. PP occurs predominantly in children, because of the absence of terminal hair in other regions. Clinical features of PP, include itching, burning sensations, margin eyelid erythema, and brown deposits on eyelashes. There are no official treatment guidelines, so the treatment of PP can be challenging. Many therapeutic options are available, such as mechanical removal of nits and parasites, and topical or oral agents.

**Case report:** A 2-year-old male presenting with a two-week history of irritation of the eyes, eyelid redness, and crust-like deposits on eyelashes. The patient was initially referred to an ophthalmologist, where he was treated as blepharitis, with topical antibiotics and corticosteroids with an unsatisfactory therapeutic response, which is why he was referred to our dermatology department. Complete physical and additional dermoscopy examination revealed numerous brownish oval nits, empty shells attached to eyelashes, and one adult parasite, so the diagnosis of PP was confirmed. The patient was treated with oral ivermectin (200 µg/kg body weight) twice, 1 week apart, in combination with topical application of permethrin 5% cream and permethrin 1% shampoo, and the mechanical removal of the eggs was recommended. After two weeks, all symptoms disappeared, leaving behind a few more nits attached to the eyelashes, for which mechanical removal was continued.

The second case was a 9-year-old female, with a history of itching skin lesions in the occipital region and irritation of both upper eyelids. In her past medical history, the diagnosis of psoriasis vulgaris was noted. The clinical examination discovered a few erythematous exudative papules in the occipital region and on the back of the neck and retroauricular lymphadenopathy. Dermoscopy was additionally used, which helped visualising of *Phthirus pubis* occipitaly, and a few eggs on eyelashes. Oral ivermectin 200 mcg/kg weekly for two consecutive weeks and permethrin 5% topically were prescribed, resulting in complete infestation eradication after two weeks.

The source of infection was the children's parents who were diagnosed with phthiriasis pubis and treated in primary health care.

**Discussion:** The prevalence of typical *Phthirus pubis* infestation in the adult population is approximately 2%. The prevalence of PP is unknown, but it is higher in low-income countries, with overcrowding, poverty, and low hygiene. PP is rarely reported, only as case series and case reports, but we think that this is not as rare as it is suggested. We believe that many cases are unrecognized or misdiagnosed as blepharitis. The absence of terminal hair in children may explain why this manifestation is primarily seen in children. A high level of suspicion and careful examination of eyelashes will lead to a correct diagnosis, for confirmation dermoscopy is an easy and useful tool.

**Conclusion:** Dermatologists, but primarily ophthalmologists should be aware of this rare manifestation, so diagnosis of PP can be made in time. Awareness of possible child abuse must be considered. Treatment with the combination of oral ivermectin, topical permethrin, and mechanical removal of eggs is usually successful.



**Abstract N°: 2339****Description of a of black piedra in a patient with HIV infection**

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**Introduction & Objectives:** due to high population migration from tropical countries, cases of rare skin diseases in European regions, including superficial mycoses, have become more frequent. Superficial mycoses include keratomycosis, such as pityriasis versicolor and piedra, which affect the stratum corneum of the epidermis and the hair cuticle.

In terms of prevalence, fungal diseases of the skin and its appendages occupy first place in all countries. In this connection, dermatologists and mycologists are actively involved in the study and treatment of dermatomycosis.

**Materials & Methods:** the study used data from the medical history of a patient undergoing treatment at the Center for the Prevention of AIDS and Infectious Diseases

**Results:** a 27-year-old woman with acute HIV syndrome was admitted to the Center for the Prevention and Control of AIDS and Infectious Diseases for examination and treatment. During an objective examination, black dry nodules 1-2 mm were detected around the hair shafts. If the nodules crushed, a characteristic crunch appeared and hair broke off. Microscopy revealed numerous ascospores in the crushed nodules. Based on culture results, the pathogen *Piedraia hortae* was identified. Based on the anamnesis, complaints, clinical picture and laboratory test data (microscopy and culture), the diagnosis of Black Piedra was verified. The patient was prescribed ketoconazole shampoo 2 % and terbinafine tablets 250 mg orally daily for 6 weeks. At the end of the treatment course no nodules were visible, but after 16 days several "new" black stones appeared, and therefore a course of voriconazole was prescribed for 14 days. The outcome for the patient was favorable: she was discharged to continue observation in an outpatient.

**Conclusion:** Black piedra is a superficial fungal infection that causes the formation of hard nodules along the hair shaft. A disseminated infection, trichosporonosis, occurs predominantly in immunocompromised patients receiving chemotherapy or immunocompromised individuals. This disease is an anthroponosis, but the presence of the pathogen in the soil and water of standing reservoirs gives reason to assume other methods of infection. Some types of algae in freshwater lakes contain large amounts of the pathogen, which is associated with a more frequent development of the disease in swimmers and fishermen. The level of hygiene of the population plays a significant role in the spread of the disease. The most effective method of influencing the pathogen is considered to be the use of antifungal agents from the triazole group ( voriconazole ). The prognosis for patients with black piedra is favorable - patients fully recover and restore the normal appearance of their hair.



**Abstract N°: 2343****clinical case of cryptococcosis with skin lesions due to HIV infection**

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**Introduction & Objectives:** the relevance of HIV infection is beyond doubt due to the constant increase in incidence and deterioration in the quality of life of patients. Cryptococcosis is an AIDS-marker disease; its frequency in HIV-infected patients is 5-12%. Cryptococcosis is an opportunistic blastomycosis caused by unicellular yeast-like fungi of the genus *Cryptococcus* and characterized by a predominantly aspiration mechanism of transmission. In immunocompetent individuals, the pathogen is localized in the lungs; in immunodeficiency states, the process generalizes with the involvement of the meninges, kidneys, skin, and bone apparatus

**Materials & Methods:** patient A., 42 years old with HIV infection (stage of secondary diseases 4B) independently interrupted antiretroviral therapy. The patient considers herself ill for 2 months, when papules and nodules first appeared on the skin of the forearm and thigh, surrounded by erythema and prone to ulceration in the center.

**Results:** According to laboratory tests, thrombocytopenia and an increase in ESR were determined in the blood; C. neoformans antigen was detected in the blood serum; no pathology of the central nervous system or lungs was detected. Based on the anamnesis, clinical picture, and laboratory results, the patient was diagnosed with disseminated cryptococcosis with skin lesions, and treatment was prescribed: fluconazole 400 mg per day for 4 months and resumption of antiretroviral therapy. After 2 weeks, during therapy, the pathological process on the skin began to regress.

**Conclusion:** in order to expand the understanding of practicing physicians about cryptococcosis, an example of one of the morphological variants of the so-called opportunistic HIV-associated infection is given. Analysis of domestic and foreign literature on this topic showed the variability of the clinical features, characterized by the involvement of the lungs, central nervous system, bone apparatus, kidneys, skin in the pathological process, as well as the diversity of pathogen strains cause diagnostic and therapeutic difficulties.



**Abstract N°: 2433****Global resurgence of syphilis: Indian perspective from a tertiary health care center**Aparna Palit\*<sup>1</sup><sup>1</sup>All India Institute of Medical Sciences, Kalyani, Dermatology, Venereology & Leprosy, Kalyani, India

\*\*

**Introduction & Objectives:** Syphilis is a sexually transmitted infection considered as a 'disease of antiquity.' In late 20th and early 21st century there was a global resurgence of syphilis. In the last two decades India is observing a rise in the 'cases of syphilis' which is of concern. Objective: To study the clinical profile of syphilis among the patients attending the 'sexually transmitted infections (STI) clinic' attendees in a tertiary health care center in India.

**Materials & Methods:** The tertiary care hospital is in a rural area of Eastern India. The STI clinic was started in January 2022. A retrospective analysis of the data of syphilis patients attending the clinic was made from the records.

**Results:** Total 60 patients of various STIs attended the clinic from January 2022 to April 2024. Among these 19 (31.7%) were syphilis. Age range was 18-39 years. Male: Female was 16:3. Occupations among men; students(8), medical intern (1), army employee (1), office worker(3), nurse (1) and farmers (2); among women, nurse (1) housewives (2). Nine were heterosexual with multiple partners, five were MSM, three bisexual and two denied exposure. Two were involved in 'group sex'. Clinical diagnosis was primary syphilis (2), secondary syphilis (9), early latent and late latent syphilis, two of each. Latent syphilis of unknown duration were four; one of them was primigravida in 2nd trimester. Two MSM were HIV seropositive. One had neurosyphilis as bilateral uveitis. The other had papulosquamous syphilids and asymptomatic neurosyphilis diagnosed by CSF analysis.

Concomitant non-gonococcal urethritis with reactive arthritis and recurrent herpes genitalis were detected in two. VDRL test with titer and viral serology were done in all. The VDRL titer varied from 1:16 to 1:256. Oral and rectal swabs were cultured in MSM and bisexuals. CSF analysis was done in both the HIV-positive patients. All were treated with injection Benzathine penicillin as per CDC, 2021 guidelines. No adverse outcome was recorded in the pregnant patient. Counseling for safe sex methods was done for all and condoms were supplied to men. Contact tracing was possible for 5 married patients. All patients were followed up; VDRL titer was repeated 3 monthly for fourfold decline till negativity. The HIV serology of the sero-negative patients were repeated after 3 months.

**Conclusion:** The above patient details show that syphilis is no more a 'forgotten disease.' A gradual rise of syphilis was recorded in India; 2011-2015 (5.2/100000) & 2015-2017 (7.5-10/100000). Various probable causes are; concomitant HIV epidemic; global travel; staying away from the family; casual sex, group sex, high risk sexual habits, etc. Resurgence of syphilis is of utmost significance in India for risk of prenatal syphilis. In Indian medical literature reports on prenatal syphilis are on the rise. Though stringent antenatal screening for syphilis exists, incidences of reluctance to avail institutional antenatal care among pregnant women in rural India increases the chances of undiagnosed prenatal syphilis. The duration of this study is short; hence the sample size is small. However the data obtained may be helpful to make robust protocols for contact tracing of syphilis patients and delivering antenatal care in remote areas.


**Abstract N°: 2516**
**A case report of extensive Kaposi sarcoma managed with single agent paclitaxel chemotherapy**

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<sup>1</sup>Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, Dermatology, São Paulo, Brazil

**Introduction & Objectives:**

Kaposi sarcoma (KS) is a multifocal tumor with vascular proliferation with four well-known clinical subtypes: classic, iatrogenic, epidemic (HIV-associated) and endemic (aggressive subtype that occurs in equatorial African patients without HIV condition). Human herpes virus 8 (HHV-8) is associated with most of the cases of KS. Paclitaxel can be effective as an alternative therapy for KS. We are presenting a case of a patient with HIV-associated Kaposi sarcoma who showed a good response to paclitaxel treatment.

**Materials & Methods:**

Records from a patient affected by Kaposi sarcoma that was treated with paclitaxel were reviewed by a clinical staff of the Dermatology Department in a tertiary hospital.

**Results:**

A 38-year-old male patient presented with a 6-month history of multiple purple plaques and nodules in the left inguinal region, which progressively increased in size and number. The patient was under regular treatment of HIV, with undetectable viral load and CD4 > 350. Skin biopsy showed dermal proliferation of spindle cell forming vascular channels. Immunohistochemistry markers were positive for CD-31, ERG and HHV8. The morphological and immunohistochemistry features were consistent with KS. Endoscopic study of the gastrointestinal and bronchial tract for systemic involvement investigation was done, showing no abnormalities. A total-body computed tomography revealed lymphadenopathy in the cervical, axillary, mediastinal, retroperitoneal and inguinal chains. A fine-needle biopsy of a cervical lymph node revealed just reactive lymphadenitis. The patient began receiving systemic chemotherapy with paclitaxel 80mg/m<sup>2</sup> (D1, D8, D15, and maintenance every 4 weeks), leading to the improvement of infiltration, lymphedema and reduction of the number and sizes of the lesions.

**Conclusion:**

Kaposi sarcoma (KS) is usually associated with HIV infection, immunodeficiency, or immunosuppressive therapy. The pathogenesis involves the infection by HHV-8, followed by the proliferation and migration of infected endothelial cells, leading to tumor formation. KS is characterized by purplish, red-blue, or brown-black macules, papules, and nodules prone to bleeding and ulceration. More than 90% of cases affects the lower extremities. The most frequently implicated extra-cutaneous sites are the lymph nodes, gastrointestinal tract and lungs. Histopathological exam reveals proliferating vascular channels infiltrating the dermis and subcutis and extravasated erythrocytes. KS natural history is heterogeneous and varies from indolent to more aggressive presentations. The treatment can be done with different modalities aimed to achieving disease control, preventing complications, and improving overall survival. The limited disease can be treated with high response rates by surgery, radiotherapy and intralesional chemotherapy. Systemic chemotherapy like paclitaxel, the first microtubule stabilized agent described in literature, is recommended for locally aggressive, extensive, and disseminated KS. Neutropenia is the most frequent dose-limiting toxic effect. Other side effects include fever, rash, eosinophilia, cardiotoxicity and kidney injury.



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**Abstract N°: 2647****Bacillary angiomatosis and Kaposi's sarcoma: The tale of two troublesome lesions in HIV**

Irene Arévalo<sup>1</sup>, Barbara Lada Colunga<sup>1</sup>, Cristina Gomez Bringas<sup>1</sup>, Marc Juliá-Manresa<sup>1</sup>, Jaime Gonzalez del Tanago Diago<sup>1</sup>, Rosa María Izu Belloso<sup>1</sup>

<sup>1</sup>Hospital Universitario Basurto, Dermatology, Bilbao, Spain

**Introduction & Objectives:**

The angiomatous lesions most frequently associated with advanced HIV infection comprise bacillary angiomatosis (BA) and Kaposi's sarcoma (KS). The cutaneous manifestations of these entities bear such striking similarity that they may present challenges in clinical differentiation.

**Materials & Methods:**

Case report and literature review

**Results:**

A 31-year-old Nigerian was admitted for general syndrome, with profound fatigue and oedema in the lower extremities. On the skin of the legs he presented three friable tumour lesions, along with indurated violaceous plaques on the pretibial and inguinal regions. The histological examination of a nodular lesions showed vascular proliferation compatible with bacillary angiomatosis (BA), which was confirmed by positive PCR for Bartonella Quintana. In the same lesion, immunohistochemical study for HHV-8 was positive in isolated cells, indicating a possible case of coexistent BA and KS. Furthermore, a biopsy of one plaque-like lesion was compatible with KS (with diffuse positivity for HHV-8). Laboratory analysis showed an HIV viral load of 229,000 copies/ml and 26 CD4 lymphocytes (HIV stage C3). CT scan revealed pulmonary lesions, hepatosplenomegaly, inguinal lymphadenopathy, and lytic bone lesions; findings compatible with BA. Serologies were positive for B. Haenslae (1/4096) and B. Quintana (1/256). Treatment was initiated with doxycycline (200 mg/day) and early antiretroviral therapy (ART).

**Conclusion:**

Distinguishing between BA and KS based solely on clinical presentation can be challenging, highlighting the importance of histological analysis. We report a rare case where both conditions were diagnosed simultaneously in a single skin lesion. This unusual occurrence underscores the need for thorough evaluation, given its significant implications for treatment and prognosis. Vigilance for these conditions is essential, particularly in HIV patients with low CD4 T lymphocyte counts.



**Abstract N°: 2656****Diagnostic accuracy of non-invasive markers for biopsy-proven high-grade anal dysplasia**

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**Introduction & Objectives:**

More than 90% of anal cancers are caused by high-risk (HR) human papillomavirus (HPV)-types. The highest burden of anal cancers is observed among people living with HIV. Particularly men who have sex with men (MSM) experience an up to 100-fold increased risk for anal cancer. Since 2024, international guidelines recommend screening and consecutive treatment of anal cancer precursor lesions, i.e. high-grade squamous intraepithelial lesions (HSIL), for populations at increased risk. The gold standard for diagnosing HSIL is biopsy/histology (hHSIL), which is obtained during high-resolution anoscopy (HRA). However, the capacity for HRA is very limited in most countries, and thus, screening recommendations include non-invasive diagnostics via anal sampling for HR-HPV and/or anal cytology allowing a pre-selection prior to HRA. Since the diagnostic performances of anal cytology and qualitative HR-HPV testing are considered suboptimal, alternative non-invasive markers for anal sampling are required. We, therefore, initiated 2023 a diagnostic accuracy study to assess the composite diagnostic performance of anal cytology, HR-HPV, oncogenic E6/E7-mRNA expression and host-cell methylation markers for hHSIL.

**Materials & Methods:**

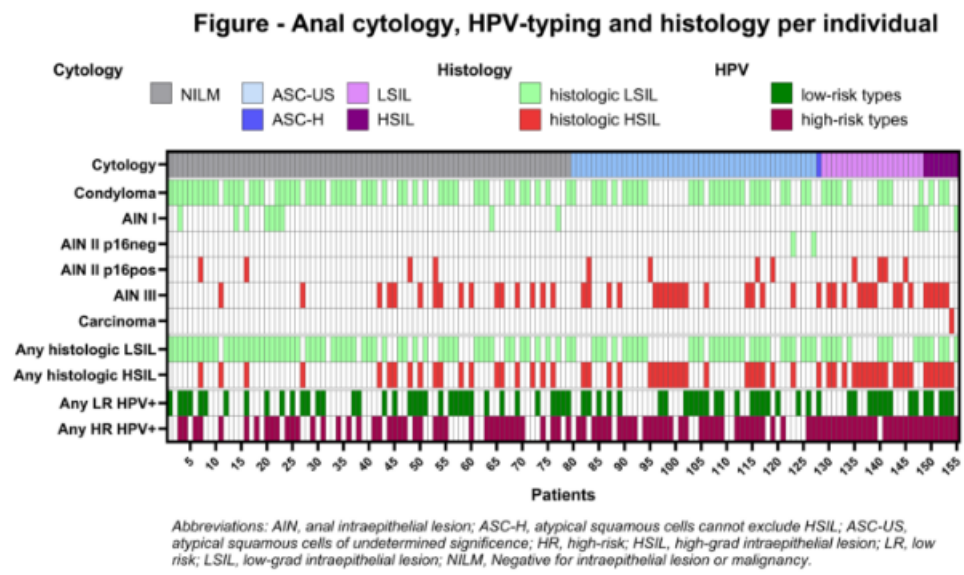
MSM living with HIV undergoing HRA at the Department of Dermatology at three German and one Austrian University Hospital are included. Before HRA, anal swabs were obtained for cytology and non-invasive markers. All abnormal finding detected during HRA were biopsied for histologic evaluation. In this abstract, we present preliminary data on the diagnostic performance of cytology and HPV-typing for hHSIL comprising the first 155 individuals. This project is supported by the EADV project proposal program (PPRC-2023-0054), the 2022 research fellowship by the Austrian Society of Dermatology and Venereology and by the German National Reference Center for Papilloma- and Polyomaviruses (Grant-No. 1369-401).

**Results:**

Among 238 biopsies obtained from 155 individuals, 31% (74/238) hHSIL – including one AJCC stage I carcinoma – were diagnosed in 38% (59/155) of patients. The cytology cut-off for abnormal findings at 'ASC-US' (atypical cells of undetermined significance) achieved a sensitivity of 67.8% and specificity of 62.5% for hHSIL. Sixty-six percent (102/155) of the swabs tested positive for at least one HR-HPV-type, demonstrating a sensitivity and specificity of 86.4% and 46.9% for solely HR-HPV and 61.0% and 75.0% for the composite analysis of ASC-US + HR-HPV, respectively. All hHSIL were treated with electrocautery (47%, 28/59), 85%-trichloroacetic acid (44%, 26/59) or surgery (8%, 5/59).

**Conclusion:**

In this preliminary analysis, the currently established non-invasive diagnostics (cytology and/or HR-HPV) demonstrated unsatisfactory diagnostic accuracy for the detection of anal pre-cancers in this highly-burdened population. Further research on anal biomarkers is required to improve non-invasive screening tools for anal cancer prevention.



**Abstract N°: 2730****Mpox and STD co-infections**Beatrice Bizova<sup>1</sup>, Filip Rob<sup>1</sup>

<sup>1</sup>University Hospital Bulovka, Dermatovenereology Department, Second Faculty of Medicine, Charles University, Prague, Czech Republic

**Mpox and STD co-infections****Introduction & Objectives:**

Mpox is a disease caused by the Monkeypox virus, which belongs to the orthopox genus of the Poxviridae family. Clinically a monkeypox case is typically reminiscent of smallpox although with an overall much less severe course. Originally described as purely zoonotic, during the following decades the virus has shown a potential for interhuman transmission via close contact with lesions, body fluids, respiratory droplets and contaminated materials. Current human-to-human transmission has been known to occur mostly in men who have sex with men (MSM). It has been suggested that mpox should be classified as a sexually transmitted disease (STD).

This study aims to optimize the care of patients with mpox infection, in particular to determine whether testing for sexually transmitted co-infections such as chlamydia, gonorrhea, syphilis and HIV is necessary.

**Materials & Methods:**

Retrospective data of all patients treated with mpox infection in 2022 at our clinic were included in the study. Patient characteristics were monitored - gender, age, sexual orientation, prior sexually transmitted infection (STI) and co-infections.

**Results:**

In 2022, 25 mpox patients were diagnosed at our department, all patients were male, age average 34,8 (22 - 62), 96% (24/25) were MSM. There were 14 (56%) patients living with HIV, no patient was newly diagnosed, two patients reported taking pre-exposure prophylaxis. Previous STD (gonorrhea, chlamydia, syphilis) was reported by 84% (21/25) of patients.

STD screening was performed in 24 patients, of which 46% (11/24) were positive for at least one STD. Gonococcal infection was diagnosed in 5 patients, 4 had gonococcal proctitis, one had urethritis and pharyngitis. Chlamydial infection was found in 4 patients, 3 patients had chlamydial proctitis, one had urethritis. Of these patients, two had simultaneous chlamydial and gonococcal infections (gonococcal urethritis and pharyngitis + chlamydial proctitis, gonococcal + chlamydial proctitis). Lymphogranuloma venereum was diagnosed in 3 patients. Early syphilis was also noted in 3 patients.

**Conclusion:**

Due to the high frequency of STD co-infections in mpox patients treated at our clinic, we recommend always completing STD screening in patients diagnosed with mpox. This testing can prevent the progression of the disease and possibly the subsequent spread of STDs.

**Abstract N°: 2761****Challenges in diagnosis and management: A case presentation of HSV1 and CMV-induced proctitis**

Roxani Kapranou<sup>1</sup>, Ourania Kotsafti<sup>1</sup>, Anastasios Giannoukos<sup>1</sup>, George Emmanouil<sup>1</sup>, Electra Nicolaidou<sup>1</sup>

<sup>1</sup>“Andreas Syggros” Hospital for Skin and Venereal Diseases, STI Unit, 1st Dpt of Dermatology and Venerology, National and Kapodistrian University of Athens, Greece

**Introduction & Objectives:**

A rising incidence of Sexually Transmitted Diseases (STD) is reported the recent years, particularly among men having sexual contacts with men (MSM) and individuals with multiple sexual partners. STDs can also appear with symptoms of proctitis, especially among MSM engaging in receptive anal intercourse.

**Case Presentation:**

A 47-year-old male presented to our STD Unit with a 15-day history of persistent perianal pain and diarrheas. He mentioned he recently underwent sigmoidoscopy and histologic examination which revealed Cytomegalovirus (CMV)-induced colitis. The patient had no past medical history. He reported sexual contacts with men and a steady partner. Clinical examination of the perianal area revealed no rash or discharge. Subsequently an anal swab for multiplex PCR was taken, which turned positive for Herpes Simplex Virus Type 1 (HSV1). Serology tests for STDs and CMV confirmed the histological findings, with positive IgM CMV antibodies, indicating a recent CMV infection. Treatment with oral valacyclovir was initiated resulting to symptoms improvement.

**Discussion:**

Proctitis, defined as inflammation of the anal canal and distal rectum, can be caused by infectious agents (enteric pathogens, sexually transmitted infections) or by non-infectious agents (inflammatory bowel disease, radiotherapy). The most commonly reported sexually transmitted pathogens associated with proctitis in the literature include *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, Herpes simplex virus type 2 (HSV2), and *Treponema pallidum*.

The majority of HSV infections in the anogenital area are connected to HSV2. However, the presence of HSV1 in our patient could be attributed to oro-anal intercourse. HSV infects the stratified squamous epithelium of the perianal area, and typically present with pain due to the abundance of sensory nerve endings. Another typical symptom of anogenital HSV infection is vesicular rash which interestingly was lacking in our patient.

CMV, also a member of the herpesvirus family, is known for causing respiratory tract infections. CMV-induced proctitis is usually reported among immunocompromised patients (HIV infection, organ transplant) and presents with diarrhea and rectal pain. Diagnosis is challenging and relies mainly on histologic and immunohistochemical findings complemented by serology tests.

**Conclusion:**

Despite the rarity of CMV-induced proctitis in immunocompetent patients, our case underscores the importance of comprehensive STD testing in patients presenting with proctitis, particularly those engaging in anal intercourse.





**Abstract N°: 2914**

**A Retrospective Study to Assess the Accuracy of Syphilis Rapid test by Chemiluminescent Microparticle Immunoassay (CIA) in volunteer blood donors**

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<sup>1</sup>AIIMS, Dermatology

**Introduction and Objectives:**

Syphilis screening methods in blood banks have recently transitioned from manual non-treponemal tests to the automated treponemal-specific enzyme immunoassays (EIA) and chemiluminescence immunoassays (CIA). Though convenient and highly sensitive, this has led to increased false positive rates leading to wastage of blood resources. This study aimed to evaluate the positive predictive value (PPV) of Tp-CIA as a screening tool in healthy blood donors and determine optimal cutoff values to improve specificity, thereby reducing unnecessary blood wastage and donor exclusion.

**Materials and Methods:**

It was a\*\* retrospective observational study conducted in a tertiary care institute in North India,\*\* that collected data for all blood bank donors testing reactive on syphilis screening and referred to the Sexually Transmitted Infections (STI) clinic from July 2019 to May 2023. Reverse sequence algorithm with immunoassay (Abbott ARCHITECT Syphilis Treponema Pallidum (TP)(Wiesbaden, Germany) is employed for screening of syphilis in our blood bank in healthy volunteers. Relative light units (RLU) values on Tp-CIA are recorded for all patients, and donated blood from all patients with RLU>1 (reactive as per manufacturer cut-off) is discarded. These patients thereafter undergo clinical evaluation followed by VDRL and confirmatory TPHA testing. Based on TPHA as gold standard, syphilis is diagnosed and treated. These retrospective records were utilised to calculate the positive predictive value of the screening test (Tp-CIA). A receiver operating curve (ROC) was also plotted to determine a new threshold (RLU) for improved test performance.

**Results:**

A total of 1791 patients were referred over 4 years as per blood bank records. Only 271 (15.13%) of these presented to the STI clinic, indicating a high referral loss. Of patients with CIA titres available, 119/202 (58.9%) were diagnosed as confirmed syphilis based on VDRL and TPHA positivity, out of which majority (92.4%) were latent syphilis. PPV of Tp-CIA rapid test at RLU>1 (manufacturer recommendation) was 64.3%, with an area under the ROC curve of 0.86.

Our study uncovered that increasing the cut-off for positive results to  $RLU \geq 2.5$  maintains the test sensitivity to 100%, while avoiding false positives in 12.4% of patients. Meanwhile, patients with  $RLU \geq 24.63$  (100% specificity) could be conclusively diagnosed as syphilis, and directly referred for treatment. It is in the patients with  $RLU \geq 2.5$  and  $< 24.63$  that reflexive confirmatory TPHA is required to be done on the same sample (dual testing) before informing the patient in order to minimise the psychological impact due to false positive results.

**Conclusion:**

The manufacturer cut off for syphilis CMIA rapid test ( $RLU > 1$ ) maintains high sensitivity but generates high false positives, causing nearly 1/3rd of patients to be referred unnecessarily, as well as blood wastage. Appropriate cut-



off points for EIA/CIA remain insufficiently investigated across diverse populations beyond manufacturer recommendations. Reflexive confirmatory testing with a second treponemal assay can minimize the psychological impact on healthy donors and prevent unnecessary donor exclusion.

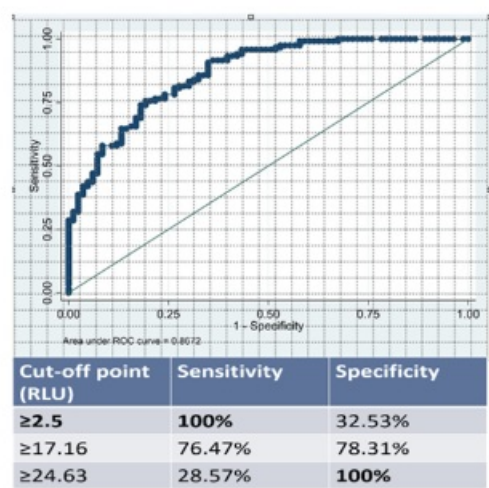


Figure 1. Receiver Operating Characteristic (ROC) Curve for Tp-CIA with AUC=0.86





**Abstract N°: 2986**

## **Rising cases of Syphilis in post-Covid era: A single center study from a tertiary care hospital in Nepal**

Shraddha Uprety<sup>\*1</sup>, Sangeeta Paudel<sup>1</sup>, Pratichya Thapa<sup>1</sup>

<sup>1</sup>Chitwan Medical College and Teaching Hospital, Dermatology, Venereology and Leprology, Bharatpur, Nepal

### **Introduction & Objectives:**

Syphilis is a sexually transmitted infection caused by *Treponema Pallidum*. Syphilis has also been termed a shadow epidemic, with the rising number of cases throughout the world in recent years. CDC has reported that 7% increase in cases of primary and secondary syphilis in 2020 as compared to 2019. There was a further increase of 38% in 2021 when compared to 2019. There has been a rise in number of neuro and congenital syphilis as well. The COVID-19 pandemic has affected the healthcare delivery system throughout the world and this has had multiple impacts. We have noted a sharp increase in cases of syphilis in our practice in a tertiary care center in Nepal after the COVID-19 pandemic.

In this study, we aim to compare the number and clinic-demographic profile of cases of syphilis detected in our dermatology outpatient services pre and post-COVID-19 pandemic.

### **Materials & Methods:**

This is a retrospective descriptive study where we reviewed the outpatient database of our dermatology outpatient services. We have compared the number and clinical-demographic profile of cases of syphilis detected in our outpatient services pre and post-COVID-19 pandemic. The government of Nepal declared the first COVID-19 lockdown on 24 March 2020 and all the COVID-19-related restrictions were lifted throughout the country by March 2022. Hence, for this study, we considered pre-2020 as the pre-COVID era and post-March 2022 as the post-COVID era. All cases of syphilis detected in our outpatient department during a year-long time frame of April 15, 2018 to April 14, 2019, were included in our study as pre-COVID cases. All cases of syphilis detected in our outpatient department during a year long time of April 15, 2022 to April 14, 2023 were included in our study as post-COVID cases. The age, gender, and stage of syphilis of all the patients were noted. Only Venereal Disease Research Laboratory (VDRL) and Treponema Pallidum Hemagglutination Assay (TPHA) positive, confirmed cases of syphilis were included in this study. Data was analyzed using SPSS version 20.

### **Results:**

We noted 11 cases of syphilis out of 27,511 outpatient visits presenting over 12 month period in the pre-COVID-19 period. This was 0.4 syphilis case per 1000 outpatient visits in the pre-COVID period. We noted 68 cases of syphilis out of 13,064 outpatient visits presenting over 12 months in the post-COVID-19 period. This was 5.2 syphilis cases per 1000 outpatient visits in the post-COVID-19 period. This is a 13 fold increase in the number of syphilis cases in the post-COVID era. Comparing the clinical-demographic profile of patients, we noted that during the pre-COVID period, 64% patients were males 36% patients were female. During the post-COVID-19 period, 73% cases were males and 27% cases were females. During the pre-COVID period 1 out of 11 patients presented with primary chancre and 9 patients presented with latent syphilis. During the post-Covid period 11 out of 68 patients presented with primary chancre and rest with latent syphilis. There was also a case of congenital syphilis detected in a 3-month-old child in the post-COVID-19 era.

### **Conclusion:**

We noted 13 fold rise in syphilis cases during 2022-23 vs 2018-19 in our center in Nepal. This tantamounts to a massive public health problem. The increase in cases presenting as chancre in the primary stage of syphilis indicates increasing transmission. Considering the rise in case of congenital syphilis, the antenatal workup should be more robust in detecting syphilis.

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**Abstract N°: 3194****Syphilis in Germany: Is it on the rise or not?**

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<sup>1</sup>Institute for Health Services Research in Dermatology and Nursing Professions (IVDP), University Medical Center Hamburg-Eppendorf (UKE), Hamburg

**Introduction & Objectives:**

In recent years, syphilis has been reported to be on the rise in several countries. German data from the Robert Koch Institute (RKI), the government's central scientific institution, show an increase of reported diagnostic cases between 2015 and 2022. Published data are often based on event-related reporting and may be highly selective from hospital statistics, which do not permit population-related conclusions. The present study assesses the population-based long-term epidemiology including regional differences of syphilis in nationwide claims data. The time-dependent prevalence data were to be compared with other sexually transmitted diseases (STD) in Germany.

**Materials & Methods:**

Large-scale German statutory health insurance data of the years 2010, 2016 and 2022 were analysed for the epidemiology of syphilis and other STD and by gender, age and regional differences. The study population consists of persons insured on the 31st December of each observation year. Prevalent persons were identified by ICD-10 GM Codes A50-A53 for syphilis and ICD 10 GM A54-A64 for other STDs including gonorrhea, chlamydia, chancroid, donovanosis, vaginal trichomoniasis or genital herpes and standardized prevalence rates were described.

**Results:**

The prevalence rate of syphilis (all forms) decreased from 88 persons per 100,000 in 2010 to 66 per 100,000 in 2016 and 52 per 100,000 in 2022. Other sexually transmitted diseases showed also decreases, e.g. vaginal trichomoniasis 46 to 19 per 100,000. In 2022, men were more likely to have syphilis (71 vs. 32 per 100,000 in women). The median age of early syphilis increased from 46 to 49 years of age (late syphilis: 70 to 74 years). Higher prevalence rates were observed in Berlin and North Rhine-Westphalia in all years. 74.7% of persons coded with syphilis lived in an urban setting (normal population: 65.9%).

**Conclusion:**

The increasing numbers of syphilis cases published by the German RKI were not observed in this nationwide claims data analysis on a person basis. Similar results, however, were obtained for the age distribution (including increasing median age) of early syphilis and for the regional distribution. Differences may derive from different sampling methods showing the need for data alignment. A limitation of claims data is the lack of information on the risk group and potential ways of infection. Differences between claims data and other health data sources need to be clarified before public reporting and campaigning.



**Abstract N°: 3274****Should asymptomatic patients with latent indeterminate Syphilis undergo CSF examination? a Retrospective observational Study**

Afik Tibi<sup>1</sup>, Judith Nevet<sup>1, 2</sup>, Hiba Abu Zayyad<sup>3</sup>, Ziad Khamaysi<sup>1, 2</sup>, Emily Avitan-Hersh<sup>\*1, 2</sup>

<sup>1</sup>Rambam health care campus, Dermatology, HAIFA, Israel, <sup>2</sup>Technion - Israel Institute of Technology, Haifa, Israel,

<sup>3</sup>Poria Medical center, Poria, Israel

**Introduction & Objectives:**

Neurosyphilis, a potential manifestation at any syphilis stage, prompts a debate over the need to perform cerebrospinal fluid (CSF) examination in cases of latent indeterminate syphilis.

This study aimed to evaluate the efficacy of CSF examination in detecting neurosyphilis among asymptomatic individuals with latent indeterminate syphilis.

**Materials & Methods:**

We conducted a retrospective analysis encompassing all syphilis patients aged 18 years and above, between the years 2000 to 2020, who underwent CSF examination at the Dermatology Department at Rambam Health Care campus.

**Results:**

Among 93 adult patients diagnosed with latent indeterminate syphilis, 85 underwent lumbar puncture (54 males, 31 females). Notably, 34% exhibited abnormal CSF results. Higher rates of abnormal CSF were observed with blood venereal disease research laboratory (VDRL) titers  $\geq 1:16$  ( $p=0.005$ ), in males (46.3%) compared to females (12.9%) ( $p=0.002$ ), and in patients with HIV versus those without HIV (56.3% and 23.5%, respectively,  $p=0.014$ ). Importantly, a normal physical examination did not reliably predict normal CSF; among those with a normal examination ( $n = 72$ ), 31.9% displayed abnormal CSF.

**Conclusions:** In asymptomatic patients with latent indeterminate syphilis, a normal physical examination does not exclude neurosyphilis. Higher risks of abnormal CSF were associated with elevated serum VDRL titers, positive HIV status, and male gender. Further investigations are warranted to identify individuals at risk for neurosyphilis, thereby preventing potential undertreatment.

Table 1: Odds ratio (OR) for abnormal CSF examination
<i>p</i> -value
0.005
0.002
0.014
0.122
0.320

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**Abstract N°: 3408****A Frequently Underestimated Condition: Case Report of Alopecia Secondary to Syphilis**Mariana Barbosa<sup>1</sup>, Giovanna Bambirra Pires de Oliveira<sup>1</sup><sup>1</sup>Universidade Católica de Brasília - Câmpus Taguatinga, Medical School, Brasília, Brazil**Introduction & Objectives:**

Syphilis is an infection caused by the bacterium *Treponema pallidum*. If left untreated, it progresses through stages of varying severity and can affect various organs and systems within the body. The objective of this report is to detail the clinical case of a woman with syphilis, who is allergic to penicillin and developed alopecia secondary to the disease.

**Case description:**

A 48-year-old woman experienced significant hair loss and madarosis for two years, attributing these symptoms to stress. She faced anxiety, palpitations, lethargy, and frequent crying. She also suffered from dyshidrosis on her hands, exacerbated by cleaning products. A scalp biopsy showed fibrosis around miniaturized follicles and a lymphocytic infiltrate in the dermis, indicative of scarring alopecia. Initially prescribed minoxidil, she had an allergic reaction, and her hand dermatitis worsened. A subsequent VDRL test confirmed syphilis. Allergic to penicillin, she underwent a 14-day doxycycline treatment. Despite treatment, her madarosis improved, but alopecia persisted. The latest VDRL test indicated latent syphilis with a 1:8 ratio. She continued with oral minoxidil and topical clobetasol, noting better hair retention but no new growth. Another 14-day syphilis treatment was prescribed and she will be re-evaluated.

**Discussion:**

Syphilis initially manifests as a painless sore on the sexual organs and swollen lymph nodes in the groin, typically appearing 2-3 weeks after unprotected sex with an infected individual. The early symptoms are mild, with the sore and lymph nodes neither itching, burning, nor producing pus. As the disease progresses, it includes a faint erythematous rash, mucous patches, and subtle grayish lesions on mucous membranes. Skin manifestations evolve into more prominent papular lesions that spread across the skin, marked by a non-itchy scaling collar. Flat condylomas, resembling HPV warts, occur alongside occasional patchy alopecia and eyelash loss. Symptoms often recede within weeks, misleadingly suggesting recovery. The primary treatment is benzathine benzylpenicillin, with doxycycline and ceftriaxone as alternatives for those with confirmed penicillin allergies, requiring rigorous clinical and laboratory monitoring to ensure effectiveness and serological cure. Proper allergy diagnosis and management are crucial to selecting the right treatment alternatives.

**Conclusion:**

This case illustrates the complexity of diagnosing and treating syphilis, particularly in patients with allergies to first-line medications such as penicillin. The patient displayed not only clinical signs of syphilis but also complex dermatological conditions exacerbated by the bacterial infection. This case underscores the need for careful evaluation and ongoing monitoring, emphasizing the importance of comprehensive differential diagnosis and a personalized treatment approach. Managing syphilis in patients allergic to penicillin presents significant challenges but also opportunities to explore effective alternative therapies.







Abstract N°: 3436

**Congenital Syphilis - A Challenging Syndrome**Enikő Lengyel<sup>1</sup>, Anikó Dózsa<sup>2</sup>, Dóra Fürjész<sup>3</sup>

<sup>1</sup>Borsod Abaúj Zemplén County Central Hospital, Department of Dermatology, Miskolc, Hungary, <sup>2</sup>Borsod Abaúj Zemplén County Central Hospital, Pediatric Health Centre, Miskolc, Hungary, <sup>3</sup>Borsod Abaúj Zemplén County Central Hospital, Neonatal Intensive Care Unit, Miskolc, Hungary

**Introduction & Objectives:** Congenital syphilis (CS) is a devastating disease that can result in stillbirth, neonatal death, prematurity and severe long-term complications. CS cases have multiplied in recent years worldwide and in Hungary as well. In our county, Borsod-Abaúj-Zemplén - located on the North-East of Hungary in 2023 we made the diagnosis of CS for three newborns and/or infants (in the whole country there were seven cases at that time). Local data suggest that the increasing prevalence of CS respectively of syphilis in pregnancy (SIP) mostly affects the socially vulnerable populations, ethnical groups. One part of those pregnant women do not access prenatal care at all. The other part of the cases which we are unable to prevent are those who are tested for syphilis at the first antenatal care visit – as WHO guidelines suggest but the infection is acquired later. So an additional testing in the third trimester and maybe even at delivery would be highly recommended at least at individuals at risk.

**Materials & Methods:** We reviewed the last five years (incl. 2024 so far) regarding congenital syphilis in our county. Herein we present the most challenging cases.

**Results:** CASE 1: A 4-month-old male infant was born per vias naturales at 37th week with a birthweight of 2390 gramms. Maternal screening for syphilis at the first trimester was negative, her pregnancy was uncomplicated. At 2 month of age the infant developed fever, respiratory symptoms, he needed hospitalization. Few weeks later severe anaemia occurred which required transfusion. At four months of age because of massive oedema, extreme hepatosplenomegaly, severe lactate-acidosis, progressive anaemia, sepsis and the suspicion of congenital nephrosis syndrome he was admitted to pediatric intensive care unit. RPR and immunoblot tests for syphilis confirmed the diagnosis of congenital syphilis. After 14 days of intravenous penicillin therapy overall state got better, Treponemal serologic tests also improved but on the third week of hospitalization fever and septic parameters reoccurred behind which fungus sepsis was confirmed (*Candida tropicalis*, *Candida parapsilosis*). After fluconazole and micafungin therapy amphotericin B administration was successful. During six weeks of intensive care the infant received seven times blood transfusion and once immunoglobulin therapy as well. Nowadays he needs nephrological care and physiotherapy.

CASE 2: A 4-week-old male infant was born per vias naturales with normal birthweight from uncared pregnancy. At four weeks of age high fever, elevated inflammatory parameters and pronounced arthralgia occurred. X-ray confirmed metaphysitis on both distal femora. After one day of empiric ampicillin therapy he developed a full-body macular rash which corresponded with Jarisch-Herxheimer reaction. Therefore syphilis laboratory tests were performed, which confirmed the diagnosis of congenital syphilis. Cerebrospinal fluid analyses were positive as well, so the diagnosis of neurosyphilis was made. The penicillin therapy of the infant is in progress at this time.

**Conclusion:** These cases highlight that the CS prevention could be improved if the populations at risk would be tested for syphilis not only in the first but in the third trimester and at delivery as well. If the diagnosis is delayed severe long-term complications occur. Nevertheless several months of examination and hospitalization are a huge disbursement for national health insurance.





**Abstract N°: 3578**

**Characteristics of Skin and Venereal Diseases in Patients with Human Immunodeficiency Virus Infection at Buleleng General Hospital, Bali Indonesia**

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**Introduction & Objectives:** Skin and venereal diseases associated with HIV are very common. It can be specifically related to HIV, but it can also be a common disease but with more severe manifestations and more difficult to treat. Such skin diseases can be associated with opportunistic infections, neoplasms, adverse drug reactions, dermatosis, xerosis (dry skin), and abnormalities in the oropharynx. Skin and venereal disease manifestations in HIV patients are significantly associated with patient morbidity. The manifestations quantitatively and qualitatively vary from incidence, clinical manifestations and severity among different ethnicities, races and regions. Environmental, cultural or genetic background also explains this variation. This study was conducted to determine the characteristics of skin and venereal diseases in patients with HIV infection at the Buleleng Regional General Hospital, Singaraja Bali, Indonesia.

**Materials & Methods:** The design of this study is using a cross-sectional study approach conducted in the period from May 2023 to July 2023. The diagnosis of HIV infection is proven by laboratory examination, while the diagnosis of skin and venereal diseases is clinically established by a dermatologist and venereologist, and if necessary, supporting examinations are carried out.

**Results:** There were 28 HIV patients with complaints of skin and venereal diseases during this period. The number of male patients compared to female is 2.1: 1 with a predominance in the age group of 31-40 years. Most of the patients are in stage 4 and the most transmission routes are due to free sex and homosexuality. There were 49 skin and genital diagnoses from 28 patients examined. The characteristics of skin and venereal diseases in patients are 57.1% of infectious disease diagnoses, the rest are non-infectious diseases. Infectious diseases include bacterial infections (syphilis, ecthyma, granuloma inguinale, Bartholinitis and crusted impetigo), viral infections (shingles, condyloma acuminata, molluscum contagiosum and herpes labialis) and fungal infections (oroesophageal candidiasis, oral candidiasis and angular cheilitis). Meanwhile, non-infectious cases consist of seborrheic dermatitis, papular pruritic eruption and drug eruption.

Table for Characteristics of Skin and Venereal Diseases in People with HIV Infection

VARIABLE	SUM, N (%)
<b>Infection</b>	28 (57,1 %)
	<b>Bacterial Infection</b>
	Primary syphilis
	Late latent syphilis
	Granuloma inguinale
	Bartholinitis
	Ecthyma
	Crusted impetigo
	<b>Viral Infection</b>
	Condyloma acuminata
	Moluscum contagiosum
	Herpes zoster
	Herpes labialis
	<b>Fungal Infection</b>
	Oral candidiasis
	Oropharyngeal candidiasis
	Angular cheilitis
<b>Non-infection</b>	21 (42,9 %)
	<b>Dermatitis and pruritic eruption</b>
	Seborrheic dermatitis
	Papular pruritic eruption
	<b>Drug eruption</b>
	Maculopapular drug eruption
	<i>Hypersensitivity syndrome reaction</i>
	Fixed drug eruption
	Steven Johnson Syndrome

**Conclusion:** Cases of infection and non-infection of the skin and genitalia are both found to be high in HIV/AIDS patients. These disorders are the cause of high morbidity, which exerts cosmetic effects and affects the quality of life of HIV/AIDS patients.



**Abstract N°: 3712****Multiple syphilitic chancres in a male patient treated with Isotretinoin for acne vulgaris**Ioana Badircea<sup>1</sup>, Brigitta Mihai<sup>2</sup><sup>1</sup>Colentina clinical hospital , 2nd dermatology department , bucharest , Romania, <sup>2</sup>ilife medical , dermatology , bucharest, Romania**Introduction & Objectives:**

Due to its many protean clinical manifestations, Syphilis has been named the “great imitator.” Syphilis is a worldwide sexually transmitted disease, caused by the bacterial infection with *Treponema pallidum*. The disease follows active and latent stages. The clinical manifestations rely upon the stages of the infection. Primary syphilis (early stage) is the initial manifestation of the disorder, succeeding the acquisition of *Treponema pallidum*, with a median incubation period of 21 days. The specific clinical finding of this stage consists of a painless solitary ulcer (syphilitic chancre) located at the site of inoculation (genital or extragenital), accompanied by bilateral regional lymphadenopathy. Multiple chancres can occur in 40% of cases, with their main cause being immunosuppression, especially HIV co-infection, or self-inoculation in contiguous surfaces. Pain is not characteristic for syphilis, hence, when present, one should rule out other diagnoses that present with multiple, painful genital ulcers, such as: genital herpes simplex or chancroid. As far as we know, there were no reports regarding atypical syphilitic chancres in the setting of Isotretinoin therapy. Herein, we report the case of a male patient treated with Isotretinoin for acne vulgaris, exhibiting painful penile ulcers and positive serology for syphilis.

**Materials & Methods:**

A 21-year-old male, with history of unprotected intercourse in the last month, presented in the clinic with 3 painful ulcers, located at the distal penile shaft, that appeared one week previously. The patient was following Isotretinoin treatment for one month for moderate to severe acne vulgaris involving the face and upper back. The physical examination revealed 3 round ulcers, located on the distal end of the penile shaft, arranged circumferentially. The ulcers presented with an elevated margin and erosive base, covered with yellow exudate. The penis was edematous, tender, with the impossibility of retracting the distal foreskin. No local lymphadenopathy was detected, and no discharge was present.

**Results:**

Laboratory tests showed positive RPR and TPHA, positive *Ureaplasma spp*, negative HIV test. A diagnosis of primary syphilis and urethritis was established. Treatment with 2.400.000 units of Penicillin G intramuscular and oral Doxycycline was initiated. Isotretinoin treatment was temporary discontinued.

**Conclusion:**

Oral retinoids are responsible for skin dryness and loss of cutaneous integrity – a possible mechanism for contiguous spreading of the initial treponemal infection site. Also, it is known that Isotretinoin modulates the immune status by decreasing the number of NK cells involved in cellular cytotoxic immune response to infection with *Treponema pallidum*, suggesting that\* both mechanisms could contribute to the apparition of atypical chancres.



## Abstract N°: 4353

### Challenges in Diagnosing Dermatological Opportunistic Infections in Treatment-Naïve Man with HIV Infection: A Case Report

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#### Introduction & Objectives:

People living with HIV exhibit a spectrum of dermatological manifestations, ranging from common conditions like opportunistic infections, seborrheic dermatitis, and psoriasis to more severe diseases like Kaposi’s sarcoma and eosinophilic folliculitis. These skin conditions can significantly impact the quality of life and may also serve as important clinical indicators of disease progression.

#### Materials & Methods:

In this report, we present a man living with HIV who exhibits systemic symptoms and dermal lesions that are resistant to treatment. By examining a real-life scenario, the case study aims to demonstrate the impact of timely intervention on patient outcomes.

#### Results:

A 53-year-old male presented with fever, diaphoresis, cough, dyspnea, and a weight loss of 14 kg over the course of 3 months. His medical record included a splenectomy 8 years prior. He describes excruciating oral ulcers and “molluscoid” lesions on the abdomen and genitalia. The laboratory tests revealed positive results for HIV-1, a viral load of 270,522, and CD4 233. A chest x-ray showed reticulonodular lesions, suggesting pneumocystis pneumonia. Trimethoprim/sulfamethoxazole was prescribed, but it failed to alleviate the symptoms.

He was referred to our hospital, persisting with cough, dyspnea, and painful skin lesions. Physical examination revealed tiny papules with central necrosis scattered over the left periorbital and retroauricular, the neck, anterior thorax, abdomen, and genitalia. Laboratory analyses revealed no abnormalities. A chest tomography revealed multiple hyperdense images of reticulonodular patterns.

Due to his HIV-naïve status, we suspected he had several opportunistic infections, including oral candidiasis, molluscum contagiosum, and miliary tuberculosis. Antifimic treatment and fluconazole were administered. But in the days that followed, neither his symptoms nor his skin condition improved.

While examining opportunistic dermatoses, blood culture, myeloculture, and bronchoalveolar lavage samples showed signs of a fungal mycelium presence. For further analyses, staining with cotton blue with lactophenol was performed, which allowed for the isolation of *Histoplasma capsulatum*. Treatment was indicated with amphotericin B deoxycholate, and the patient exhibited satisfactory clinical progression in the days that followed and was discharged home 2 weeks later.

#### Conclusion:

Histoplasmosis is an opportunistic infection caused by the dimorphic fungus *Histoplasma capsulatum*. In both its endemic and epidemic forms, it is the most prevalent systemic mycosis. Infection occurs when *Histoplasma* microconidia are inhaled into the lungs and transform into the yeast form. When cellular immunity to the



histoplasma develops, macrophages are activated and kill the organism. The main issue in patients with disseminated histoplasmosis is the inability to stimulate the fungicidal activity of macrophages.

The time it takes to get culture results (3-6 weeks) limits early histoplasmosis identification. A patient may undergo empiric treatment, which could cause toxicity and raise healthcare expenditures. However, delaying treatment until the confirmation of the culture may result in patient death. To improve patient outcomes and quality of life, further research is required to explore innovative strategies for correctly identifying and diagnosing skin diseases linked to HIV patients, including opportunistic skin infections.

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**Abstract N°: 4370****Condylomata Acuminata Successfully Treated with Topical Glycyrrhizic Acid after Failure Treatment of 80% Trichloroacetic Acid and 25% Podophyllin : A case report**

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**Introduction & Objectives:**

Condylomata acuminata (CA) or genital warts are one of the most common types of sexually transmitted infection caused by the human papillomavirus (HPV). The aim treatment for CA is eliminating the visible warts. Many treatments available for CA from nonsurgical to surgical therapy. There are developing herbal medicines used to treat CA such as sinecatechins ointment and glycyrrhizic acid solution. Glycyrrhizic acid is isolated from the roots and rhizomes of licorice, named *Glycyrrhiza glabra*. It is the principal bioactive ingredient of anti-viral, anti-inflammatory, immunostimulatory and hepatoprotective effects. The aim of this study is to evaluate glycyrrhizic acid solution in treating CA.

**Materials & Methods:**

A-19-year-old woman presented with two asymptomatic enlarged cauliflower-like verrucous tumors on bilateral labia majora since 2 months ago. She revealed unprotected sexual intercourse with 2 male partners in the previous 2 years. Acetowhite phenomenon was positive. Patient was diagnosed with condylomata acuminata (CA) confirmed by histopathology. She was treated topically with combination of 25% podophyllin in tincture of benzoin and 80% trichloroacetic acid (TCA) in alcohol solution weekly. After 6 weeks of therapy in clinic, the lesions had not shown any improvement. She refused the electrosurgery procedure to remove the warts.

The lesions are 2.5x1.5x1 cm and 1x1x0.2 cm on right and left labia majora, respectively. Routine laboratory investigations for serologic Venereal disease research laboratory (VDRL), Treponema Pallidum Hemagglutination (TPHA), and antibody againsts Human Immunodeficiency Virus (HIV) were negative.

We used alternative topical therapy, glycyrrhizic acid topical spray. According to the size of lesions, we give the instruction on how many sprays of the product had to be applied at home (once spray is equal to two small squirts). Because the affected area of skin is maximum 4 cm<sup>2</sup>, so the application will be 3 times a day.

**Results:**

Size of tumor significantly improved at the end of fifth week after using glycyrrhizic acid topical spray. Lesions became flattened and smaller as papules 0.1-0.3 cm in size.\*\* Finally, lesions clearly resolved with glycyrrhizic acid after 12 weeks application. No side effects reported during therapy.

**Conclusion:**

Glycyrrhizic acid topical is a simple, safe, effective, and patient friendly in treating genital warts. It can be regarded as an alternative therapy for CA. It can be used if standard therapy cannot give good clinical response or as a combination home therapy.





## Abstract N°: 4446

### **Development of novel patient information on self-testing for sexually transmitted infections in the form of a digital animation video**

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<sup>1</sup>Odense University Hospital, Department of Dermatology and Allergy Centre, Odense, Denmark, <sup>2</sup>University of Southern Denmark, Faculty of Health Science, Odense, Denmark

### **Development of novel patient information on self-testing for sexually transmitted infections in the form of a digital animation video**

#### **Introduction & Objectives:**

Access to high quality patient information about treatment is of great importance to allow patients to be actively involved in their own health. Digital technology in healthcare is more commonly used and patient information is increasingly becoming digital. Patients can thus more easily access knowledge about health, disease, and treatment options, also in the field of dermatology. Digital patient information may have the potential to enhance patients' empowerment and acknowledge patients with reading difficulties through audio and video. A self-test technology for chlamydia and gonorrhea was implemented in clinical practice, however the patient information needed to be brought up to date and in line with this new approach.

Thus, the aim of this study was to develop a digital patient information video for patients testing for chlamydia and gonorrhea and; to examine the acceptability among patients and healthcare professionals.

#### **Materials & Methods:**

A digital patient video was developed using animation video. The development of the digital video involved the cooperation of researchers, technology experts, clinicians and patients. The underlying theoretical framework was based on participatory design; therefore, an ethnographic qualitative approach was applied using participant observation and semi-structured interviews to identify the needs of patients. In addition, a qualitative evaluation of the video was conducted using semi-structured interviews. Interview transcripts were analysed using thematic analysis.

#### **Results:**

Relevant themes from patients and health care professionals with respect to testing for chlamydia and gonorrhea were identified, and an informal video based on animation was developed. The video provides information on diseases, guidance on testing and advises on behavior in a new and innovative way. The video is accessible at the hospital website and replaces the former oral information provided by healthcare professionals.

Patients experienced that the video was easy to understand and contained the necessary information needed to complete a self-test for chlamydia and gonorrhea. It provided them with a sense of security and preparedness prior to the self-test. The healthcare professionals experienced the video as time saving, as they no longer had to verbally provide the information, but instead could refer to the video. This resulted in greater job satisfaction, and eliminated a repetitive task of informing.

#### **Conclusion:**

Focusing on user-involvement, a digital video was developed to improve patients' knowledge and ability to use a

self-test technology when testing for chlamydia and gonorrhea. In the future, interventions based upon digital technologies will gain more ground in the healthcare sector. However, it is important to include patients and other relevant stakeholders in the process of the development to achieve a successful result.

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**Abstract N°: 4634****Alopecia syphilitica: A case of sudden onset, diffuse hair loss**Sarah Shareef<sup>\*1</sup>, Alexander Woods<sup>1</sup>, Sheryl Hoyer<sup>1</sup><sup>1</sup>University of Illinois College of Medicine at Chicago, Dermatology, Chicago, United States**Introduction & Objectives:**

Acute onset hair loss is a common complaint prompting patients to seek medical care. There are a number of etiologies of acute onset diffuse nonscarring alopecia, with telogen effluvium (TE) being the most prominent. TE is often preceded by a stressor to the body, therefore, a thorough patient history and laboratory workup should be conducted to delineate underlying causes. Herein, we present a case of alopecia syphilitica (AS) that masqueraded as TE, with acute onset of diffuse hair loss.

**Materials & Methods:**

A 33-year-old female presented with a sudden onset of asymptomatic diffuse hair loss for three months. Physical exam revealed ill-defined diffuse thinning of terminal hairs, most prominently over the frontal and mid-scalp, without scarring or ostial loss. Due to the presentation, TE with a component of androgenic alopecia versus AS were considered while a rapid plasma antigen (RPR) was pending.

**Results:**

The RPR was reactive at 1:128, and the diagnosis of AS was made. The patient underwent treatment with intramuscular penicillin 2.4 million units weekly for three weeks. Significant improvement of the hair regrowth was evident at dermatology follow-up 6 months later, and a repeat RPR titer was 1:8.

**Conclusion:**

Alopecia syphilitica has been estimated to affect 3-12.5% of patients with secondary syphilis, however, it is not currently known how often AS is the only manifestation of syphilis, as in our patient. AS is classically moth-eaten in appearance, but it can also rarely present as diffuse alopecia. Furthermore, differentiation of AS from TE in patients with longer hair may prove difficult due to long hair visually obscuring the moth-eaten pattern and the lack of representation in the literature. Therefore, with the rising rates of syphilis, a low threshold to screen for AS may be appropriate in non-classic cases of acute onset diffuse hair loss, as early recognition and treatment can prevent devastating sequelae of syphilis.



**Abstract N°: 4751****Malignant Syphilis: Diagnostic Challenge in an HIV Patient**

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**Introduction & Objectives:**

Early malignant syphilis, also known as nodular-ulcerative syphilis, represents a challenging and uncommon variant of secondary syphilis. Despite its clinical relevance, it tends to be underdiagnosed due to its diverse presentation and low prevalence. It is closely related to varying degrees of immunodeficiency, particularly in HIV/AIDS patients.

**Materials & Methods:**

We present the case of a 45-year-old female patient recently diagnosed with HIV, who is also a substance user, including cocaine.

**Results:**

The patient presents with a pruritic dermatosis, disseminated for 4 months, associated with unquantified fever and significant weight loss. On physical examination, multiple plaque-like lesions with infiltrated edges and ulcers covered by bloody crusts are observed on the upper and lower limbs. Additionally, erythematous papules with eroded centers are identified in the supraclavicular region, along with cervical and lateral inguinal lymphadenopathy.

Results show a positive VDRL and reactive EBV IgG serology. Skin biopsy reveals ulceration with necrosis and neutrophilic inflammatory infiltrate.

**Conclusion:**

This case underscores the importance of considering syphilis in the differential diagnosis of severe cutaneous lesions in HIV patients, given the increasing rate of syphilis infection.

Early diagnosis and appropriate treatment are crucial to prevent complications and achieve satisfactory outcomes. HIV patients should be thoroughly evaluated to promptly detect and treat opportunistic infections, such as syphilis, especially when atypical cutaneous manifestations are present.





**Abstract N°: 4797****Microwave technology as a novel treatment for anogenital warts**Rima Clayton<sup>1</sup><sup>1</sup>Derma Reading, Woodley, United Kingdom**Introduction & Objectives:**

Anogenital warts (AGWs), or condyloma acuminatum, are flat, papular, or pedunculated lumps or growths occurring in and around the anus or genital area. They are a common sexually transmitted infection mostly caused by nononcogenic HPV types 6 or 11. Usually asymptomatic, they can sometime be itchy, painful, bleeding and cause discomfort depending on their location and size. Here, we sought to investigate the feasibility of using microwave energy to treat anogenital warts in a small set of patients, following the success of this modality in resolving HPV-infected cutaneous warts in other body regions. A patient had failed prior treatments for their AGWs using over-the-counter medicines and clinical interventions.

**Materials & Methods:**

Using a microwave device designed and CE marked for use in dermatology, a total of 2 male adults aged 22 and 26 years old (for a total of 3 distinct AGWs sites) were treated with a non-ablative dose of microwave energy (3-5W for 3 seconds; 8GHz) applied to all warts located around their anus or genital area. Each lesion received 5 successive dose repeats of microwave energy before moving on to the next lesion. Patients returned to the clinic every 3 weeks, at which point another treatment with microwaves was administered as before, if required.

**Results:**

Using this treatment regime, all 3 sites had full resolution within 2 (2/3; 66%) or 3 (1/3; 33%) treatment visits. Because previous over-the-counter and clinical therapies were unsuccessful in clearing the lesions, a systemic immune response similar to that previously suggested for HPV-infected cutaneous warts and molluscum contagiosum is a possibility and warrants further investigation. Microwave treatments can be associated with a certain degree of short-lived, acute pain, especially in sensitive location such as the anus or genital area, this led to a maximum reported pain of 4/10 and to the use of topical anaesthetic cream for 1 site. Patients reported to be "happy" with the microwave therapy outcome.

**Conclusion:**

This small case report with excellent outcomes suggests that microwave therapy could become a new tool for the treatment of condyloma acuminatum. Topical creams, cryotherapy and surgical removal are currently the main choices of treatment across many practices; however, microwave therapy offers a less destructive/invasive and less painful treatment modality and may only require treatment on a subset of lesions as well as having a reduced reoccurrence rate, similar to observed cutaneous warts. Self-administered topicals are frequently incorrectly applied that directly affects efficacy. This novel treatment would not only make the treatment faster in the clinic, saving both patient and clinician time, but also less traumatic to the patient undergoing the treatment. Further research and studies into the safety and efficacy and underlying biomolecular and immune responses are required.



**Abstract N°: 5501****A meta-analysis of effectiveness on antibiotic prophylaxis for sexually transmitted infections in people with high-risk sexual behaviors**Xingbao Luan<sup>1</sup>, Dan Luo<sup>1</sup><sup>1</sup>The first affiliated hospital of Nanjing Medical University, Dermatology, Nanjing, China

**Introduction & Objectives:** The effectiveness of antibiotic prophylaxis for bacterial sexually transmitted infections (STIs) is controversial. This study aimed to summarize evidence regarding the efficacy of antibiotic prophylaxis in preventing gonorrhea, chlamydial infection, and syphilis in people with high-risk sexual behaviors.

**Materials & Methods:** PubMed, EMBASE, and Cochrane Central Register of Controlled Trials were systematically searched to identify relevant randomized controlled trials (CRD42024494611). The pooled relative risk and 95% confidence interval of bacterial STIs incidence rate was calculated using meta-analysis with a random effect model. Subgroups based on clinical characteristics were analyzed to investigate possible significant influence factors of heterogeneity. Sensitivity analysis was conducted to verify the stability of results.

**Results:** Six studies in five articles involving 2,671 participants with high-risk sexual behaviors were included in meta-analysis. The prophylactic antibiotics included azithromycin, minocycline, and doxycycline. Overall, antibiotic prophylaxis was found to decrease the incidence rates of gonorrhea (0.58, 0.41-0.80) and chlamydial infection (0.33, 0.19-0.57), but did not have a significant effect on syphilis (0.35, 0.12-1.03). In subgroup analyses, reduction of syphilis infection could be achieved by doxycycline prophylaxis (0.21, 0.09-0.49). No serious adverse events were related to antibiotic prophylaxis.

**Conclusion:** This study summarized preliminarily the evidence that antibiotic prophylaxis for bacterial STIs in people with high-risk sexual behaviors was effective and acceptable. Pre-exposure prophylaxis using azithromycin could lower the incidence rates of both gonorrhea and chlamydial infection; post-exposure prophylaxis using doxycycline could reduce the incidence rates of gonorrhea, chlamydial infection, and syphilis.



**Abstract N°: 5590****One train can hide another**

Saber Zerriaa<sup>1</sup>, Marouane Ben Kahla<sup>2</sup>, Manaa Linda<sup>1</sup>, Haj Messaoud Hamza<sup>1</sup>, Jaziri Fatima<sup>1</sup>, Haj Messaoud Chadia<sup>1</sup>, Beltaief Nabil<sup>1</sup>

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**Introduction & Objectives:**

Seborrheic dermatitis is a widely common papulosquamous dermatitis affecting the scalp, the face and the trunk. This benign condition is more common in patients with HIV disease. As a large number of HIV patients may only have an asymptomatic infection after the exposure, the disease could be the first symptom revealing the HIV infection.

**Materials & Methods/Case report**

A 47-year-old patient was hospitalized in our department for infected facial lesions with fever. The patient reports a recent weight loss with night sweats. During interrogation, the patient declares having unprotected sexual intercourse. On general examination we found centimetric cervical lymphadenopathy and splenomegaly.

Dermatological examination reveals impetiginized erythematous lesions covered by scales and thick crusts affecting the entire face. An unilateral conjunctiva was associated.

First-line blood test revealed a predominantly lymphocytic leukocytosis, a normochromic normocytic anemia, and thrombocytopenia. Bacteriological and mycological samples from the face isolated a staphylococcus as well as malassezia spores. CRP rate was 38 without any other abnormalities.

**Results:**

Faced with this profuse and infected seborrheic dermatitis as well as the alteration of the general condition we thought of underlying immune deficiency.

We completed the explorations with a CT scan which revealed multiple bilateral axillary adenomegaly with hepatosplenomegaly. The anti-nuclear antibodies were negative. Viral serologies came back positive for HIV and negative for syphilis, hepatitis B and hepatitis C.

We accepted the diagnosis of HIV-associated lymphoma. The patient was transferred to the infectious diseases department for further treatment.

**Conclusion:**

Although seborrheic dermatitis is a benign and common disease, it can be the first indicative of a HIV infection as in our case. Dermatologist and physician awareness about this association could help to diagnose HIV disease earlier to improve the management of the disease and reduce the contagiousness. The treatment in this patient population is more difficult. It is based on topical antifungals, calcineurin inhibitors, and especially anti-retroviral therapy.



**Abstract N°: 5692****Giant condyloma acuminata associated to inverted psoriasis : A case report**Yousra Habibi<sup>1</sup>, Hali Fouzia<sup>2</sup>, Baghdad Bouchra<sup>2</sup>, Marnissi Farida<sup>2</sup>, Chiheb Soumia<sup>2</sup><sup>1</sup>CHU Ibn Rochd, Dermatologie, Casablanca, Morocco, <sup>2</sup>CHU Ibn Rochd, Casablanca, Morocco**Introduction & Objectives:**

Giant condyloma acuminata is a rare HPV-related sexually transmitted disease, characterized by its considerable size. It is responsible not only for cosmetic discomfort, but also for real anatomical and functional problems. Therapy is not yet standardized, but surgical resection is the treatment of choice. Our objective was to report a rare case of the association of giant condyloma and psoriasis.

**Materials & Methods:****Results:**

A 110-year-old diabetic patient on metformin for 20 years, with a history of non-protected sexual relations, presented with pruritic vegetative lesions of the perineum evolving for 40 years. Clinical examination revealed a patient in good general condition with cauliflower-like exophytic lesions grouped together on an erythematous, finely scaly background with clear borders, infiltrated in places, in the perianal, scrotal and penile regions. Some erythematous-squamous drop lesions in the folds and on the scalp. Proctological examination visualized verrucous lesions of condylomatous appearance with no mucosal involvement. Histological study of a wide and deep skin biopsy of the condylomata revealed a giant condyloma acuminata with no sign of malignancy. Histological study of the erythematous plaque biopsy showed hyperkeratosis with parakeratosis and acanthosis of the epidermis, concluding in reverse psoriasis. The patient was treated with topical betamethasone for his psoriasis, with disappearance of the erythematous plaque after treatment. Surgical treatment was indicated, but in view of the patient's age and associated defects, treatment with radiofrequency and TCA was proposed. The patient died a few months later.

**Conclusion:**

Condyloma acuminata, also known as Bushk-Lownstein tumor, is caused by the HPV, which is transmitted sexually. The association of Psoriasis and HPV is rare and uncommon. Indeed, Psoriasis is known to be triggered by streptococcal and HIV infections. The pathophysiological mechanisms of this association are poorly understood and deserve to be explored to conclude that HPV could trigger psoriasis.





**Abstract N°: 5877**

### **Sexual function and quality of life impairment in anogenital warts : A prospective study**

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#### **Introduction & Objectives:**

Sexual activity is an important facet of social functioning and quality of life. As the anogenital warts (AGW) represent the most common sexually transmitted infection, we aimed to study the sexual function and quality of life impairment for both man and woman with AGW.

#### **Materials & Methods:**

We conducted a monocentric prospective study in the dermatology department of our hospital from 01 January to 31 August 2023 including all adults with AGW diagnosed clinically. We performed a clinical examination and assessment of quality of life and sexual dysfunction using the Dermatology quality of life index (DLQI) for both genders, International Index of Erectile Function (IIEF) for man and female sexual function index (FSFI) for woman.

#### **Results:**

Twenty-three patients were included with a mean age of 34+/-13,75 and extreme ages of 19 and 71 years. Sex ratio male/female was 2,23. Meantime delay for first consultation was 0,72 years. Seventeen percent of warts were located in penile area, 29,4% in perineal area and 47,1% in perianal area. For females, all warts were located in vulvar area. Papular warts represented 76,5 % of cases and giant Buschke Lowenstein warts were observed in 23,5% of cases. For men, mean global IIEF was 25,59/75 for man representing mild impairment of global sexual function. We noticed an erectile dysfunction in 82,35% of cases with different degrees: 76,47 % have severe dysfunction, 5,9 % have moderate dysfunction and only 17,6% have normal erectile function. For woman, mean global FSFI was 18,75 but with a big variance (SD=14,46). Two women have severe impairment, 1 moderate and 2 mild impairment. Concerning the specific domains, we find an impairment in desire, arousal and lubrication for 2 patients and in orgasm and satisfaction for 3 patients. Two patients didn't have any sexual relations. Forty seven percent of our patient mentioned impairment in quality of life and mean DLQI was 8,09 for men and 8,33 for woman without gender significant difference ( p=0,89 ). We didn't find significant difference between men and woman for both quality of life index and sexual function index was found. (p=0,71 and p=0,54).

#### **Conclusion:**

Sexual activity and quality of life are both important for social functioning and both impaired in patients with AGW. Studies have shown that the effects of this infection on the health-related quality of life of women are more significant than men. Also, AGW in woman have significantly unfavorable effects on sexuality in adolescence leading to sexual dysfunction as well as sexuality-related distress. For men, erectile dysfunction is strongly correlated to age but many other factors and disease can operate. In our study more than 80% of patients complained about erectile dysfunction. It also impacts negatively the relationship with the partner and decreased sexual satisfaction in their female partners. This negative impact could be added to the burden of anogenital warts and require more studies with higher number of patient and more efforts to prevent this disabling disease.

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**Abstract N°: 6126****Differential clinical presentation of mpox infection in patients living with HIV**

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**Introduction & Objectives:**

The 2022 *mpox* infection outbreak affected mainly men who have sex with men (MSM). These patients presented with papules and pseudospustules in the inoculation area, mainly genitalia and face, followed by a polymorphous rash and associated with fever and asthenia. In contrast with endemic form, the main route of transmission was close contact, especially sexual contact. Up to 40% of *mpox* infection occurred in people with HIV infection (PHIV). The aim of this study was to describe the epidemiological and clinical characteristics of patients with *mpox* infection and to determine the differences between *mpox* infection in PHIV and those without HIV.

**Materials & Methods:**

A prospective single-center study was conducted in patients with high-suspicion/confirmation of *mpox* infection. Those who agreed to participate signed informed consent and completed a questionnaire that included epidemiological aspects, sexual practices and symptoms. Past history such as HIV infection, CD4+ lymphocyte count, CD4+ nadir, clinical and hospitalization characteristics were collected from the clinical records. A descriptive statistical analysis and comparison between groups was performed.

**Results:**

775 patients were included from May 2022 until December 2023. Overall, 98.2% were male, 97.8% MSM of those 40.3% were PHIV. HIV infection was well controlled in the vast majority of these persons and mean of CD4+ lymphocyte count was  $769 \pm 341$  cells/mL. Seven patients had less than 200 CD4+ cells/mL. PHIV reported more often chemsex use than those without HIV (35.3% vs 25.1%,  $p=0.009$ ). PHIV presented more frequently lesions in the perianal area (44.2% vs. 20.2%,  $p<0.001$ ) and in the thorax (29.2% vs. 19.9%  $p=0.003$ ), and proctitis as a complication (40.4% vs. 31.3%,  $p=0.012$ ). One HIV patient was admitted for myopericarditis and had a good evolution. Nine patients, 2 of whom were HIV-positive, presented ocular involvement as a severe complication. PHIV and a CD4 cell count lower than 350 cells/mL did not have more aggressive lesions. No patients died, and the number of hospital admissions was similar in both groups.

**Conclusion:**

*Mpox* infection presents as a self-limited condition with similar morbidity and mortality in PHIV on antiretroviral therapy with good immunovirological control. A higher prevalence of chemsex was observed in the PHIV group, along with an increased frequency of perianal involvement and proctitis. There was no higher rate of severe complications in PHIV.







**Abstract N°: 6403**

**Temporal trends in *Neisseria gonorrhoeae* among cis-gender women and men, and transgender persons.**

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**Introduction & Objectives:**

In 2022-2023, various European countries noted an increasing prevalence of *Neisseria gonorrhoeae* (Ng), especially among cis-gender women and heterosexual cis-gender men. We assessed positivity rates of Ng over time among men who have exclusively sex with men (MSM), men who have exclusively sex with women (MSW), men who have sex with men and women (MSMW), women, and transgender persons.

**Materials & Methods:**

We analysed routinely collected data from 2018-2023 and calculated *Neisseria gonorrhoeae* (Ng) positivity rates. Temporal changes in Ng were assessed using a multilevel mixed-effect generalized linear model using three time periods: pre-COVID-19 (1 January 2018-12 March 2020), during COVID-19 (13 March 2020-1 March 2022), and post-COVID-19 (2 March 2022-31 December 2023).

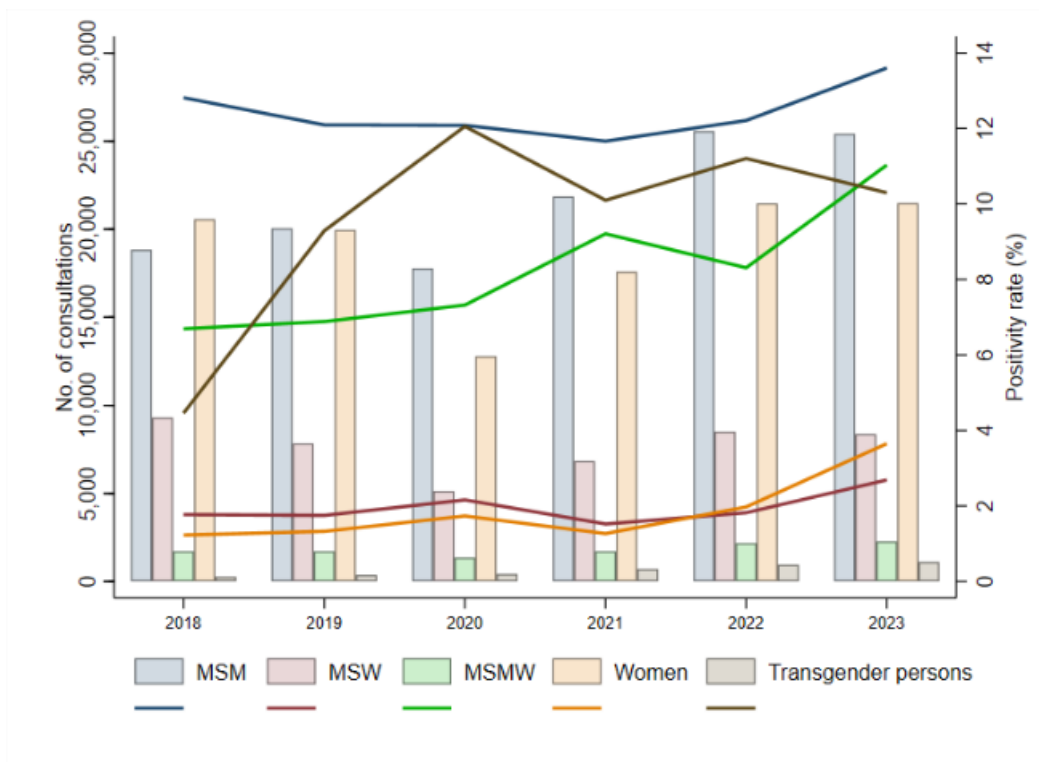
**Results:**

In 2018-2023, we diagnosed 20,497 Ng in 304,066 consultations. Positivity rates pre-COVID-19 were 12.4% in MSM, 1.7% in MSW, 6.7% in MSMW, 1.3% in women, and 8.3% in transgender persons. Post-COVID-19, the positivity rate increased to 13.0% in MSM, 2.3% in MSW, 9.9% in MSMW, 2.9% in women, and 10.4% in transgender persons. The annual positivity rates are shown in Figure 1. The risk of Ng increased post-COVID-19 compared to pre-COVID-19 for MSW (prevalence ratio (PR)=1.31, 95%CI=1.12-1.53), MSMW (PR=1.47, 95%CI=1.26-1.72), and women (PR=2.25, 95%CI=2.04-2.49). For MSM, risk of Ng remained similar pre- and post-COVID-19 (PR=1.03, 95%CI=0.99-1.07). The risk of Ng increased post-COVID-19 among MSW and women with a larger number of sexual partners and who used alcohol, whereas post-COVID-19 a history of STI, and an age over 24 years decreased the risk of Ng compared to pre-COVID-19.

**Conclusion:**

Post-COVID-19, we noted an increase in Ng among MSW, MSMW and women, but not in MSM. This was associated with changes in sexual behaviour and engaging in sex under influence of alcohol among MSW and women. Effective prevention programs for heterosexual clients are needed to curb the spread of Ng.

**Figure 1:** Positivity rate of *Neisseria gonorrhoeae* over time among MSM, MSW, MSMW, women and transgender persons, 1 January 2018 to 31 December 2023



**Figure 1:** Positivity rate of *Neisseria gonorrhoeae* over time among MSM, MSW, MSMW, women and transgender persons, 1 January 2018 to 31 December 2023

**Abbreviations:** MSM, men

who have exclusively sex with men; MSW, men who have exclusively sex with

women; MSMW, men who have sex with men and women.



**Abstract N°: 6601****Characterization of the clinical spectrum of balanitis: a retrospective observational study**

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**Characterization of the clinical spectrum of balanitis: a retrospective observational study****Introduction & Objectives:**

Balanitis is defined as inflammation of the glans penis. If foreskin is also involved, the condition is known as balanoposthitis, even though these terms are used interchangeably. Approximately 3% of uncircumcised men are affected globally as most cases are related to inadequate or poor hygiene.

Predisposing factors include diabetes mellitus, obesity, trauma and edematous conditions. When an etiology can be identified, candidal infection is the most common. Various other infectious agents, dermatologic conditions such as psoriasis, or premalignant conditions have also been associated with balanitis.

There is contradictory evidence if chronic balanitis may predispose to premalignant and malignant lesions.

In this retrospective study we aimed at evaluating epidemiological data, risk factors, causes and complications of balanitis.

**Materials & Methods:**

We conducted a retrospective analysis of patients referred to a Sexually Transmitted Infection consultation (STI) in a tertiary hospital in Porto for balanitis in the last decade (2013-2023). We accessed the database and collected and analysed parameters such as age, past history of STI or diseases such as diabetes, immunosuppressive treatments, clinical diagnosis of balanitis, complementary exams such as swab cultures or skin biopsy, treatments options, complications and follow up.

**Results:**

A total of 204 patients were evaluated. Of these, 31 patients (15,2%) were referred by primary care physicians due to balanitis but presented no lesions on observation.

For the 173 patients who presented clinical balanitis, the mean age was 51 years ranging from 15 to 91 years; 2.9% had history of previous STI (hepatitis B, HIV, Gonorrhoea, Chlamydia, and Neurosyphilis). Diabetes was a comorbidity found in 12.7 % (n=22) of the 173 patients evaluated.

Regarding clinical diagnosis, the most common was non specific balanitis (24.9%) followed by lichen sclerosus (21.4%), lichen planus (17.3%), Zoon balanitis (14.5%), candida balanoposthitis (8.7%) and genital psoriasis (6.4%).

From the 173 patients, 45.6% were referred to skin biopsy. Histology showed lichen sclerosus in 29.1%, followed by nonspecific results in 22.7% , lichenoid balanitis/lichen planus in 16.4% and Zoon balanitis in 15.2%.

Squamous cell carcinoma of the penis was confirmed by biopsy in 4.6% of the patients evaluated with balanoposthitis.

**Conclusion:**

As balanitis is a common complaint in general male population and an important cause for patient evaluation in STI clinic but also for the general practitioner, understanding the most prevalent causes, risk factors and complications is important.

Our study focused on patients referred to a tertiary hospital for balanitis and evaluated the most common clinical and histological diagnosis in the last 10 years. The most prevalent diagnosis was non specific balanitis followed by lichen sclerosus. In the biopsied patient's group, lichen sclerosus was the most common diagnosis.

We found no clear correlation between chronic balanitis/inflammation and squamous cell carcinoma.

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**Abstract N°: 6627****Unintentional administration error of benzathine penicillin in syphilis post-partum woman**Erika Zoulba\*<sup>1</sup>, Annisa Fadilla<sup>1</sup><sup>1</sup>Rumah Sehat Untuk Jakarta RSUD Kebayoran Baru, Dermatovenereology, Jakarta Selatan, Indonesia**Introduction & Objectives:**

Syphilis is a preventable and curable sexually transmitted disease (STI) caused by *Treponema pallidum* infection. Most infections are asymptomatic, therefore patient delayed visiting health facility. Benzathine benzylpenicillin (BP) injections still treatment of choice for early-stage syphilis, including for pregnant women. BP indicated for intramuscular (IM) injections because it can be harmful if injected intravenously (IV). There have been reports of unintentional IV administration, which has been associated with fatal outcome. We report a case of inadvertent IV administration of BP instead of IM injection.

**Results:**

A 33-year-old woman visited our maternity ward and had spontaneously vaginal labour for her third babies. Antenatal care done in another city and the syphilis result come positive, but patient never had therapy before delivery. She was prescribed BP for her late syphilis, but the injection was incorrectly administered IV instead of IM. The patient was intensively supervised for 48 hours after injection, based-on the half-life of the drug. She did not show any visible clinical symptoms after receiving drug via the wrong route. There were decrease haemoglobin value (11 g/dl), other than that complete blood count was normal. All other laboratory investigations were within normal range, including prothrombin time (PT) and activated partial thromboplastin time\* (APTT). We follow-up patient for any grievance related to blood vessel blockage for the next 3 months after that near-miss event. Patient still follow up for her syphilis titer six month after therapy.

**Conclusion:**

This nearly fatal case of a drug-related problem categorised as a wrong-route-error. It draws the lessons of contributing factors to the administration of medication through the appropriate route. Special precautions should be considered to avoid intravascular injection of BP, including avoid IM injections near major nerves or blood vessel to prevent neurovascular damage. In addition, the role of clinical pharmacist as well as the increasing capacity building such as updated knowledge, personal development and communication skills which address the impact for patient's safety.



**Abstract N°: 6889****Herpes vegetans in a patient living with human immunodeficiency virus: A case report and literature review**Conor Larney<sup>1</sup>, Millie Osti<sup>1</sup>, Jacqui Jiang<sup>1</sup>, Anita Lasocki<sup>1</sup><sup>1</sup>St. Vincent's Hospital Melbourne, Fitzroy, Australia**Introduction & Objectives:**

A 51-year-old man with human immunodeficiency virus (HIV) infection being treated with antiretroviral therapy presented to the dermatology clinic with a 2-year history of recurrent penile ulceration. Lesions would appear approximately monthly on his penile shaft and under the foreskin, and would heal spontaneously. He had been treated previously with several months of valaciclovir prophylaxis with resolution of ulceration. On physical examination there was a large fungating exophytic mass with ulceration. There was no inguinal lymphadenopathy. Further investigation revealed CD4 count 133 HIV 33p/ml viral load. Two 3mm punch biopsies revealed hyperplastic ulcerated squamous epithelial tissue with focal exocytosis and dense nodular plasma cell infiltrate, as well as scattered lymphocytes, eosinophils and some neutrophils. There was some partly detached epithelial cells with binucleation, multinucleation and nuclear inclusions seen which are HSV2 positive and weak positivity for HSV1. Spirochete immunohistochemistry was negative. There was no evidence of invasive carcinoma. A diagnosis of herpes vegetans was made.

**Materials & Methods:**

We performed a literature review to identify cases of herpes vegetans in an effort to further characterise the condition, identify at risk populations and specify successful treatments.

**Results:**

We found over twenty reported cases of herpes vegetans. Almost all patients were immunocompromised and responded to oral antivirals.

**Conclusion:**

Herpes vegetans, also known as hypertrophic herpes simplex, is an uncommon manifestation of HSV infection in immunocompromised patients. It manifests as verrucous, proliferative or ulcerative lesions often with a chronic persistent course. Lesions most commonly affect the genitals and perianal region but may affect other body parts including the face. Treatment with oral valaciclovir generally results in complete resolution of lesions.



**Abstract N°: 7485****Buschke-Löwenstein Tumor with malignant transformation: clinic and dermoscopy**

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**Introduction & Objectives:** The Buschke-Löwenstein Tumor is a rare tumor classified among sexually transmitted diseases, caused by infection with the human papillomavirus (HPV), mainly types 6 or 11 in the anogenital region, presenting a potential for malignant transformation.

**Materials & Methods:** We report a case of a patient presenting with a giant condyloma acuminatum evolving over 30 years with malignant transformation.

**Results:** A 62-year-old male patient, chronic smoker with no history of risky sexual behavior according to his statements, presented to the dermatology consultation for a painless genital tumor evolving over 30 years, progressively increasing in size with a tendency to erosion. Clinical examination revealed a foul-smelling cauliflower-like tumor in the genital region encompassing the penis and sparing the perianal area. Dermoscopy showed multiple filiform and round projections with looped vessels at the summit, thick yellowish scales, a hairpin and glomerular vascular pattern in the foul-smelling area. HIV serology was negative. Histology revealed a papillomatous epidermis with high-grade intraepithelial neoplasia and numerous koilocytes on the surface; the dermis showed no signs of invasion. Total excision of the tumor with penile reconstruction was performed with good recovery. Giant condyloma acuminatum of Buschke-Löwenstein occurs more frequently in men, typically affecting the glans penis, prepuce, and perianal regions. Clinical presentation is typical with a verrucous tumor with a cauliflower-like appearance; the surface may be keratotic or ulcerated. Dermoscopic signs have been reported in a few cases in the literature, including filiform and round projections as found in our case, looped or dendritic vessels at the summit of the papillae, and thrombosed pinpoint vessels. This entity is considered by some authors as an intermediate lesion between condyloma acuminatum and squamous cell carcinoma. Careful histopathological evaluation is essential to identify malignant transformation, although clinical and dermoscopic findings can provide guidance. Indeed, ulceration clinically is strongly correlated with malignant transformation, as for glomerular and hairpin vessels found on dermoscopy. Surgical excision remains the treatment of choice.

**Conclusion:** In the presence of a foul-smelling or ulcerated giant condyloma acuminatum, dermoscopy can guide biopsy to detect malignant transformation, thus adapting patient management.







## Abstract N°: 8107

### Sexually transmitted diseases: An unprecedented global overview of their prevalence

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#### Introduction & Objectives:

Sexually transmitted infections (STIs) represent a major public health issue, with marked disparities according to age, geographical region and socio-economic factors. This large-scale study is the first to provide a global overview of STIs, underlining the crucial importance of appropriate management by

#### Materials & Methods:

The ALL PROJECT is a large-scale study of individuals representative of the adult population in 20 countries on five continents. In each of the 20 countries surveyed, representative and extrapolable samples of the general population aged 16 and over were interviewed. The questionnaire focused on patient experience. It collected information on demographics and the presence of a Sexually transmitted infections (STIs) in the last 12 months.

Multivariate logistic regression was used to assess the relationship between the presence of an STI and the explanatory variables: gender [male vs. female], location [living in an urban area vs. a semi-urban or rural area], world region [Europe vs. North America, Latin America, Asia, Middle East, Africa], whether or not the respondent had a higher education qualification, and declared ethnic origin [mixed vs. black, white, Asian, other]. Statistical analysis was performed using EasyMedStat (version 3.36; [www.easymedstat.com](http://www.easymedstat.com)).

#### Results:

50552 people were interviewed: 3.07% [n=1552] said they did not know and 3.82% [n=1931] admitted to having had an STIS in the last 12 months [ males 1087 (4.28%) vs females 844 (3.35%) p-value <0.001

The presence of STISs is significantly higher the younger the person is: 5.36% among those aged 30 and under [n=664]; 4.11% among those aged 30 to 55 (n=1017) and 1.47% among those aged 55 and over [n=178]. Prevalence rates by region and ethnicity are shown in Table 1.

In multivariate analysis, the absence of a degree (OR=1.32, [1.15 ; 1.51], p <0.0001), compared to living in Europe in North America (OR=1.47, [1.2 ; 1.8], p= 0.0002), Asia (OR=1.6, [1.2 ; 2.14], p= 0.0016), or the Middle East (OR=1.72, [1.33 ; 2.23], p <0.0001) were associated with higher rates of STISs.

Compared to a Mixed ethnicity, reporting an Asian (OR=0.43, [0.33 ; 0.58], p <0.0001) or White (OR=0.53, [0.44 ; 0.65], p <0.0001) ethnicity, Compared to living in Europe living in Africa (OR=0.61, [0.42 ; 0.88], p= 0.0089) or Latin America (OR=0.74, [0.6 ; 0.92], p= 0.007) declaring a low income (OR=0.51, [0.46 ; 0.58], p <0.0001), living in a rural area (OR=0.68, [0.59 ; 0.79], p <0.001), were associated with lower rates of STISs.



In multivariate analysis, being male or female was not associated with reporting an STIS.

Conclusion:

This study, the first of its kind on such a large scale, provides valuable information on the prevalence of Sexually transmitted infections (STIs) in 20 countries across five continents. With over 50,000 participants, the survey provides a global and comparative overview, highlighting significant differences by age, geographical region, level of education and ethnic origin. The results show an increased prevalence of STIs among young people, people with no education and in certain regions of the world, particularly Europe, where rates are comparable to those reported in the EADV 2022<sup>1</sup> study. This work should serve as a reminder of the importance of dermatologists in the management of STISs and the need to raise awareness of these issues at a global level. These data, from the first study of this size, should lead to a re-evaluation of STIS prevention and treatment strategies worldwide.

Table 1

Variable	EUROPE N = 20 502	ASIA N = 10 500	NORTH AMERICA N = 7 500	LATIN AMERICA N = 6 501	AUSTRALIA N = 2 000	AFRICA N = 1 800	MIDDLE EAST N = 1 750	p-Value
Gender								<0.001
Man	10 127 (49.4%)	5 437 (51.78%)	3 762 (50.16%)	3 173 (48.81%)	994 (49.7%)	880 (48.89%)	10 15 (58.0%)	
Woman	10 374 (50.6%)	5 063 (48.22%)	3 738 (49.84%)	3 328 (51.19%)	1 006 (50.3%)	920 (51.11%)	735 (42.0%)	
Sexually transmitted infections (STIs)	581 (2.83%)	536 (5.1%)	296 (3.95%)	258 (3.97%)	63 (3.15%)	69 (3.83%)	128 (7.31%)	

Variable	WHITE N = 25 544	ASIAN N = 11 175	MIXED N = 4 344	BLACK N = 3 099	OTHERS N = 1 004	NO RESPONSE N = 538.7	p-Value
Gender							<0.001
Man	12 532 (49.06%)	5 909 (52.88%)	2 131 (49.06%)	1 660 (53.57%)	558 (55.58%)	259.8 (48.24%)	
Woman	13 012 (50.94%)	5 266 (47.12%)	2 213 (50.94%)	1 439 (46.43%)	446 (44.42%)	278.8 (51.76%)	
Sexually transmitted infections (STIs)	684 (2.68%)	529 (4.73%)	277 (6.38%)	214 (6.91%)	57 (5.68%)	170 (3.16%)	

