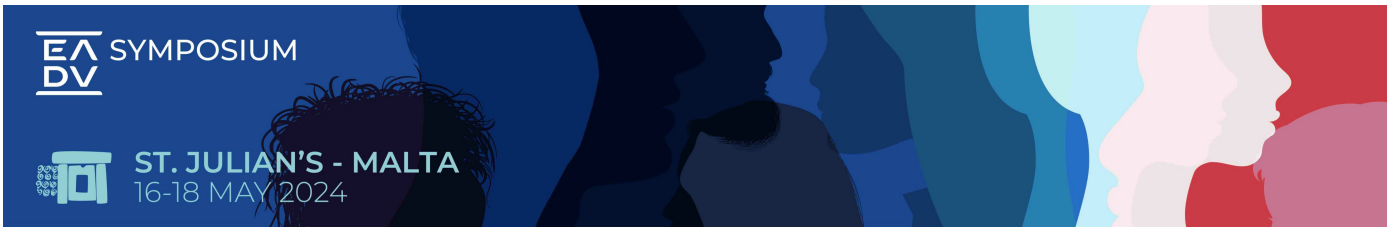


Abstract N°: 107

Recessive dystrophic toxic epidermolysis bullosa: a case report

Vasiliki Karathanasi*[1], Archontoula Papadimitriou[2], Panagiota Theofilogiannakou[3], Aikaterini Malouchou[3], Kalliopi Skrepetou[4]

[1]General Hospital of Athens Evaggelismos , Department of Dermatology & Venereology , Athens , Greece,[2]General Hospital of Athens Evaggelismos , Department of Dermatology & Venereology , Athens , Greece, [3]General Hospital of Athens Evaggelismos , Department of Dermatology & Venereology , Athens , Greece, [4]General Hospital of Athens Evaggelismos , Department of Dermatology & Venereology , Athens , Greece

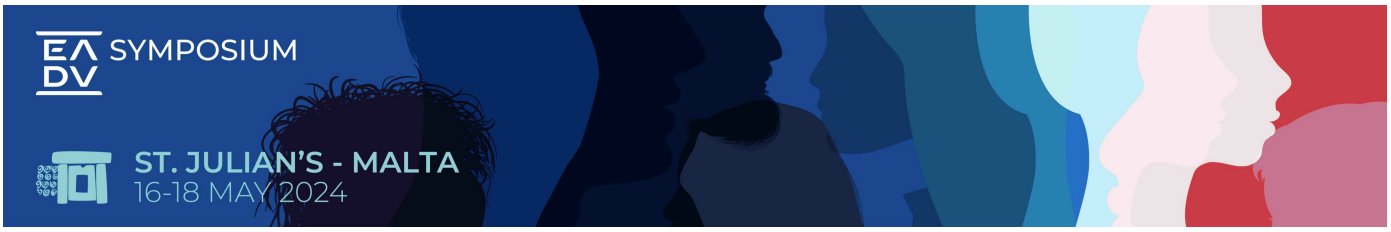
Introduction & Objectives: Recessive dystrophic epidermolysis bullosa (RDEB) is a rare subtype of the genodermatosis Epidermolysis Bullosa (EB) characterized with blistering, wounding and scarring of the skin and mucosae. RDEB is caused by mutations in the gene encoding collagen VII (COL7A1), the major component of the anchoring fibril component and its prevalence is reported at 1.35 per million in the United States.

Materials & Methods: A 19-year old male was transferred to the Emergency Room with high fever, coughing, mild dyspnea, severe malaise and diffuse muscle and joint pain of 2 days duration. A diagnosis of lower respiratory infection was made and the patient was immediately hospitalized. Upon clinical dermatological examination the patient demonstrated severe extensive skin blistering with chronic wounding, scarring and hyperfibrosis, mitten deformities and fusion of digits, teeth loss, microstomia and diffuse hemorrhagic ulcerations.

The medical birth history consisted of a term baby of normal weight and height which immediately after birth demonstrated extensive epidermolysis, atrophy of the left foot and digital fusion. The cardiological evaluation revealed atrial septal defect and the gutrin test G6PD deficiency. A skin biopsy was immediately performed and showed dystrophic epidermolysis bullosa while further DNA testing revealed RDEB. Since birth, the patient is located at home living an extremely compromised life under the constant supervision of his health care provider who treats his skin lesions with topical antibiotic and wounding agents on a daily basis as even a minor injury might cause severe new blistering foci and bleeding.

Results: The patient during his hospitalization received a combined antibiotic treatment with subsequent clinical response and exited the hospital with no delay in order to minimize the risk of any hospital infection transmission.

Conclusion: RDEB is a lifelong devastating type of EB consisting of extensive severe blistering, ulceration and scarring of the skin and mucosae and accompanied by secondary extracutaneous complications such as anemia, dysphagia, compromised mobility, infections, sepsis and carcinogenesis. The patients require a multidisciplinary medical care and surveillance while the daily treatment of the skin lesions with the local application of antiseptic and wound healing agents still remain of great importance. Correction of genetic skin diseases via direct gene transfer in vivo has been a longstanding yet unrealized goal in the gene therapy field of EB group diseases.



Abstract N°: 389

Vitamin D-Dependent Rickets Type II with Alopecia

Joe Khodeir*[1], Hala Abi Rached[2]

[1]University of Balamand, Saint Georges Hospital Medical Center, Dermatology, Beirut , Lebanon,[2]Saint Georges University of Beirut, Saint Georges Hospital Medical Center, Dermatology, Beirut , Lebanon

Introduction & Objectives:

Vitamin D-dependent rickets type II-A (VDDR2) is a rare inherited autosomal recessive disorder known as Rickets-Alopecia syndrome. Genetic mutation results in a defect in the vitamin D receptor (VDR), leading to target resistance to 1.25-dihydroxy vitamin D. As a result, VDR cannot regulate gene activity, even with normal amounts of vitamin D in the body. Resulting in alopecia, hypocalcemia, hypophosphatemia, secondary hyperparathyroidism, and rickets.

Materials & Methods:

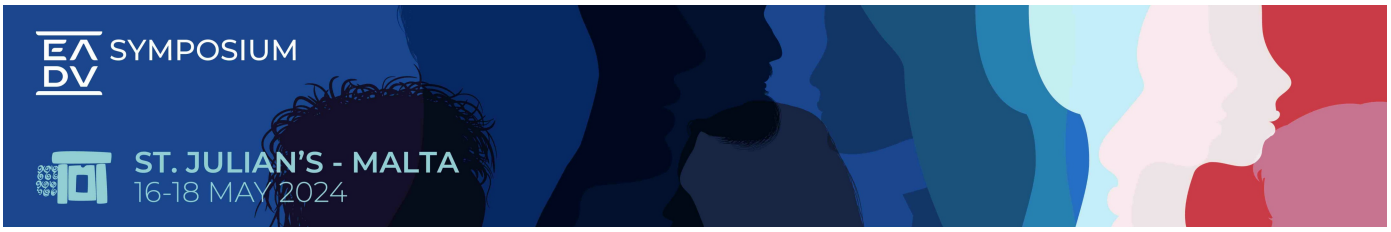
This is the case of a 10 months old baby girl, who presented to the dermatology clinic for absent hair growth on her scalp since birth. Physical exam showed occasional few anagen hair on her scalp with absent hair on eyebrows and few hairs on eyelashes. The rest of the exam showed no nails dystrophy, teeth abnormalities, palmoplantar keratoderma, facial bone abnormalities and no facial or body papules. The parents report no history of hypo-hidrosis or heat intolerance. Prominent frontal bossing with increased head diameter was seen. Dermoscopy demonstrated normal hair shafts. On the review of system there was no history of seizures, mental retardation or difficulty walking. Her parents happened to be from the same village, with no consanguinity. They report having 2 family relatives with absent hair since birth. History and physical exam were enough to rule out congenital atrichia with facial papules and ectodermal dysplasia. However, an underlying metabolic disorder was suspected. For this reason, the patient was referred for whole exome sequencing, which was positive for “vitamin D receptor VDR gene - homozygous mutation”. This led us to the diagnosis of Vitamin D-Dependent Rickets Type II with Alopecia. Total bone X-rays of the wrists, knees, hips and hands were ordered and turned normal. However, laboratory investigations were pertinent for low vitamin D level 17 ng/ml, high alkaline phosphatase level: 532 (normal 50-136 IU/L), very high parathyroid Hormone level: 800 (normal < 60 pg/ml). The patient was started on oral 1-alpha-hydroxy vitamin D3 with high dose of oral combination of calcium carbonate, cholecalciferol and magnesium oxide.

Results:

Genetic mutation in VDDR2, located on chromosomes 12, leads to a defect in the vitamin D receptor (VDR). VDDR2 appears to be more frequently documented in Arab populations, due to the high incidence of the disease’s gene and the elevated rate of consanguineous marriages. Depending on the presence or absence of alopecia, it is further classified as VDDR type IIA or IIB, respectively. It manifests with complete body hair loss and the development of rickets in the latter part of the first year of life. Alopecia presents in first few months of life and advances to alopecia totalis by childhood and is typically refractory to management. Lack of the VDR leads to increased expression of the hairless (*Hr*) protein that regulates hair follicle cycling. Alopecia is associated with the most severe forms of VDDR2, with early onset of hypocalcemia and poorest response to therapy. Mild-to-moderate cases are managed by high doses of oral calcitriol and supplemental calcium. Severe cases need the administration of intravenous calcium infusion.

Conclusion:

Vitamin D-dependent rickets type II A is a very rare disorder, with only a few cases being reported in the English literature. The role of the dermatologist is very important in the prompt diagnosis of the disease since alopecia is the earliest manifestation of the disease even before rickets development.



Abstract N°: 545

Successful management of oral manifestation of Sturge-Weber syndrome: A case report with a multidisciplinary approach

Eunjung Kwak*[1], Young Chan Kim[2], Ko Eun Kim[2], Jiehyun Jeon[2], Yoo Sang Baek[2]

[1]National Dental Care Center for Person with Special Needs, Seoul National University Dental Hospital, Seoul, Korea, Rep. of South, [2]Guro Hospital, Korea University College of Medicine, Dermatology, Seoul, Korea, Rep. of South

Introduction & Objectives:

Sturge-Weber syndrome is an uncommon congenital neuro-oculo-cutaneous condition characterized by a distinctive birthmark known as a port-wine stain. Additionally, patients exhibit leptomeningeal vascular malformation on the ipsilateral brain associated with seizures and glaucoma. The oral manifestation of Sturge-Weber syndrome is often under-recognized in daily practice.

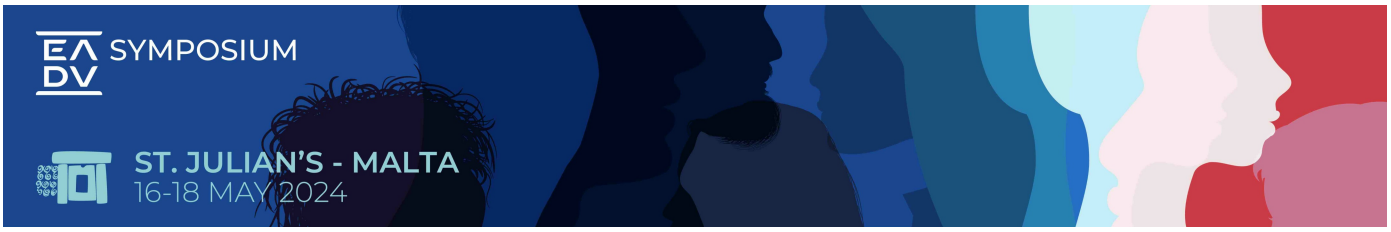
Materials & Methods:

Results:

A 37-year-old male patient with mental retardation presented to the dental clinic due to frequent oral bleeding. Residing in a facility for individuals with disabilities, the patient has no family or relatives, and the facility staff acted as the guardian during the visit. Therefore, he had never been officially diagnosed with Sturge-Weber syndrome. During the oral examination, gingival swelling, partial coverage of the coronal part by gingival overgrowth, and easy bleeding were observed. A clinical examination revealed two erythematous rubbery nodules accompanying a port-wine stain on the left forehead. Following a dermatology department referral, a punch biopsy of the nodular lesion confirmed a vascular proliferative lesion consistent with vascular malformation, prompting collaborative efforts with neurology and ophthalmology departments. Brain imaging revealed general atrophic features with diffuse possible calcific deposits in the subcortical area and cortical enhancements, predominantly in the left cerebrum. Ophthalmic examination confirmed secondary glaucoma. For the frequent oral bleeding, local anesthesia was administered, and gingivectomy and scaling were performed simultaneously using electrocautery and laser. Subsequent one-year follow-up confirmed a significant reduction in oral bleeding and malodor, leading to an improved quality of life.

Conclusion:

Herein, we present a case of a patient who initially presented with oral bleeding, ultimately leading to the diagnosis of Sturge-Weber syndrome. Through a multidisciplinary approach, the patient's final diagnosis was established, and effective control of the oral manifestation was achieved. This case highlights the importance of prompt multidisciplinary diagnosis and management of oral manifestations associated with Sturge-Weber syndrome.



Abstract N°: 633

Are EB cells affected differently by biofilms than healthy keratinocytes and does this play a role in EB wound chronicity?

Hadeer Ibrahim Hussein Ahmed*[1, 2], Josefine Hirschfeld[3], Sarah Kuehne[3, 4, 5], Mohammed Hadis[1, 6], Adrian Heagerty[7], Iain Chapple[4, 8]

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Introduction & Objectives:

Epidermolysis bullosa (EB) is a group of genetic disorders that cause structural fragility of skin and mucous membranes resulting in blisters/bullae following minor mechanical trauma, which collapse or rupture, to leave open wounds that may cause systemic and life-threatening complications. Currently, no cure is available and management focusses on wound care, management of pain and complications such as scarring. Chronic wounds impact significantly on both patients and health care systems. Biofilms, which are microbial aggregates embedded in a self-produced matrix along with inflammatory cells attached to a surface, play a crucial role in wound chronicity and impairment of wound healing in different medical conditions like diabetic or venous ulcers and chronic burn wounds where biofilms were reported in up to 60%. Moreover, their presence within wounds creates diagnostic and management challenges and impacts upon wound care being more resistant to antimicrobial therapies. Our earlier work demonstrated, for the first time, that chronic EB wounds also exhibit biofilm presence. In this study we report an *in-vitro* model to investigate whether biofilms play a role in EB wound chronicity and whether EB cells react differently to biofilm presence in comparison with healthy keratinocytes.

Materials & Methods:

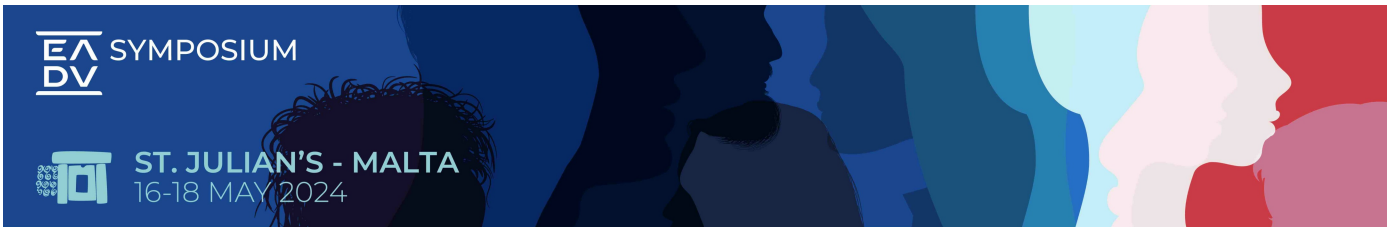
Biofilm-conditioned medium (BCM) and planktonic bacteria-conditioned medium (PCM) prepared using a mixed culture of biofilm-forming bacteria commonly found in EB chronic wounds and normalized for colony-forming unit counts, namely, Staphylococcus *aureus* SA SH1000 and Pseudomonas *aeruginosa* PA01, were employed, and their effect on a primary immortalized EB cell line (KEB-7) and healthy keratinocytes (NEB-1) was tested. More comprehensive data on the nature of such changes will be presented using cell healing assays, cell cytotoxicity assay (WST-8/CCK8 assay) and scanning electron microscopy images comparing both EB and healthy keratinocyte cell lines responses to BCM and PCM.

Results:

Our preliminary findings obtained by microscopic assessment demonstrated that in response to BCM presence EB cells show more remarkable changes in response to BCM presence in the form of cell detachment, cell death, rounding up, and membrane irregularities than healthy keratinocytes.

Conclusion:

This study will add new knowledge pertaining to the pathophysiology of EB wound chronicity despite meticulous medical care and may and may lead to changes to EB wound management focused upon biofilm disruption.



Abstract N°: 758

The use of oral sodium cromoglycate in inherited epidermolysis bullosa

Sera Sarsam[1, 2], Annabel Stevenson[3, 4, 4, 5], Dédée Murrell[1, 2]

[1]St George Hospital, Department of Dermatology, Kogarah, Australia, [2]UNSW Medicine, Kensington, Australia, [3]The University of Adelaide, Faculty of Health and Medical Sciences, Adelaide, Australia, [4]The Queen Elizabeth Hospital, Department of Dermatology, Woodville South, Australia, [5]Royal Adelaide Hospital, Department of Dermatology, Adelaide, Australia

Introduction & Objectives:

Epidermolysis Bullosa (EB) is a rare, genetically inherited skin disorder that currently lacks a definitive treatment. Therapeutic options for EB are limited, with the primary focus on symptom control. Sodium cromoglycate was widely employed in its inhaled form for managing bronchial asthma and in its oral form for treating mastocytosis in children. Its efficacy is attributed to mast cell stabilization.

Materials & Methods:

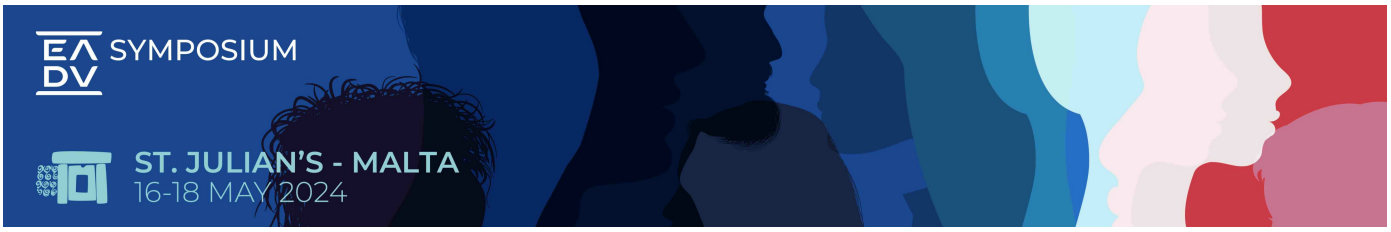
We present three cases of patients with EB-induced pruritus managed with oral sodium cromoglycate. The first patient is a 41-year-old Caucasian female with dominant dystrophic EB due to a COL7A1 variant. The second and third patients are a 61-year-old male and an 18-year-old male, both with recessive dystrophic EB. All three patients were initiated on a daily dose of 100mg sodium cromoglycate for EB-induced pruritus and were followed up over a three-month period. Validated EB disease Activity and Scarring index (EBDASI) and quality of life in epidermolysis bullosa (EB-QoL) were measured at baseline and at 3 month follow up.

Results:

Patients 1 and 2 achieved reductions in EBDASI activity of 67% and 77%, respectively, along with reductions in EB-QoL of 8% and 30%, respectively. The third patient experienced an 83% reduction in their Dermatology Life Quality Index (DLQI) and a 50% improvement in skin breakdown. Furthermore, patient 3 exhibited a paradoxical increase in the Tween Itchy score from 74 to 78, raising questions about the score's validity for chronic genetic causes of itch.Top of Form

Conclusion:

The use of oral sodium cromoglycate for reduction in pruritus in EB has not yet been described. Reducing pruritus is an important therapeutic aim in EB as this allows trauma to be minimised, and accordingly less bulla formation. Sodium cromoglycate has many other applications in Dermatology, namely in mastocytosis, bullous pemphigoid and atopic dermatitis. It has been demonstrated through tryptase immunostaining that biopsies of skin in patients with EB contain significantly more mast cells than control skin, which explains why this medication holds promise for this disease, however, further prospective studies are required to better assess its efficacy.



Abstract N°: 759

The use of colchicine in epidermolysis bullosa

Sera Sarsam[1, 2], Ben Koszegi[1, 2], Victoria Rudolph-Stringer[1], Dédée Murrell[1, 2]

[1]St George Hospital, Department of Dermatology, Kogarah, Australia,[2]UNSW Medicine, Kensington, Australia

Introduction & Objectives:

Epidermolysis Bullosa (EB) is a rare and genetically inherited skin disorder characterised by increased skin and mucous membrane fragility, resulting in erosions and persistent wounds. Colchicine is a medication classified as an anti-gout agent and anti-inflammatory drug. Currently, treatment options for EB are limited, with treatment focused on symptom management with no approved systemic treatments available.

Materials & Methods:

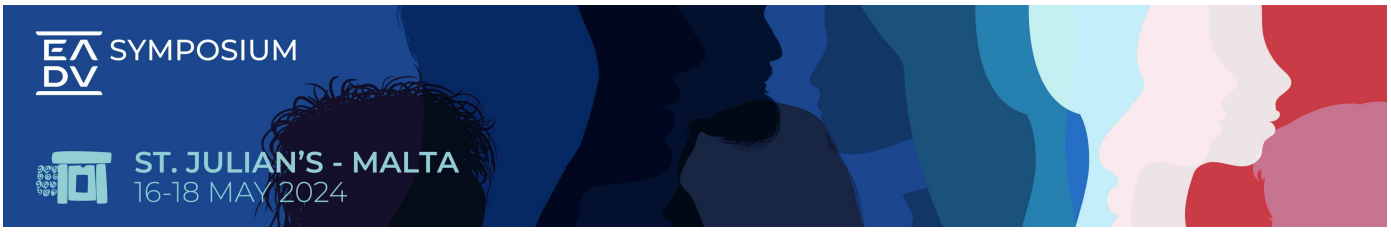
We report three cases of colchicine use in ameliorating EB wounds.

Results:

The first and second patients are siblings diagnosed with junctional EB due to a LAMB3 variant. Both patients have severe widespread skin erosions affecting the scalp, face, trunk and lower limbs. The third patient has dominant dystrophic EB due to COL7A1 variant, resulting in skin erosions predominantly affecting the lower limbs. All three patients were initiated on oral colchicine at a dosage of 500 mcg once daily and were monitored over a period of six months with the validated EB Disease Activity and Scarring Index (EBDASI). Patients 1, 2 and 3 achieved reductions in their EBDASI activity of 65%, 78%, and 67% respectively.

Conclusion:

The repurposing of colchicine in EB has been previously described in literature. The precise mechanism by which colchicine reduces blistering and facilitates wound healing is still not fully understood; nevertheless, its anti-inflammatory and antimitotic properties imply potential efficacy in the treatment of EB. This case series contributes additional evidence to the literature, reinforcing the efficacy of colchicine in the management of EB and highlighting the need for continued investigation into its mechanisms and clinical applications in blistering diseases.



Abstract N°: 821

Chronic Granulomatous Disease Presenting With Recurrent Skin Infections

Carmen Montagnon[1], Ryan Khodadadi[1], Zachary Yetmar[1]

[1]Mayo Clinic, Rochester, United States

Introduction & Objectives:

A man in his early 20s presented with a five-year history of nonhealing skin lesions, initially developing as clustered erythematous bullae forming ulcerated and impetiginized serum-crusted lesions, spread diffusely across his body at various stages of healing, but sparing the palms, soles, and oral mucosa.

Materials & Methods:

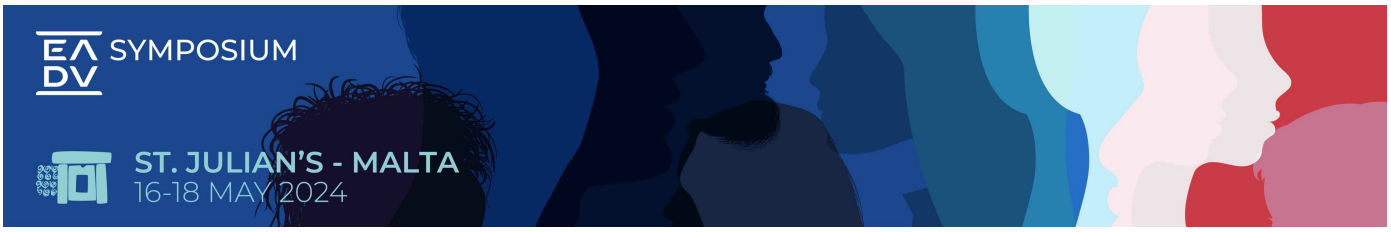
Skin biopsy, tissue cultures, and neutrophil function testing were obtained.

Results:

Skin biopsy showed dermal neutrophilic inflammation. Tissue cultures isolated Staphylococcus aureus. Neutrophil function testing revealed a moderate decrease in dihydrorhodamine positive cells and a profound decrease mean fluorescence intensity following stimulation with phorbol-12-myristate 13-acetate (PMA) and N-Formyl-methionyl-leucyl-phenylalanine (fMLP), a pattern compatible with chronic- granulomatous disease (CGD). Subsequent genetic testing revealed a homozygous pathogenic variant within the neutrophil cytosolic factor 1 (NCF-1) gene responsible for encoding the protein p47phox, part of the nicotinamide adenine dinucleotide phosphate (NAPDH) oxidase complex, consistent with autosomal recessive CGD.

Conclusion:

CGD is a genetically variable condition characterized by severe recurrent infections and dysregulated inflammation due to functional mutations of the NADPH oxidase complex of phagocytes needed to generate reactive oxygen species (ROS) to eliminate catalase-producing bacterial and fungal organisms. While most cases are identified in childhood, presentation in adulthood has become increasingly recognized. Clinical manifestations include pulmonary, cutaneous, lymphatic, and hepatic infections. Initial diagnostic testing includes neutrophil function testing and if abnormal is followed by confirmatory genetic testing. Management involves lifelong antimicrobial prophylaxis with trimethoprim sulfamethoxazole and itraconazole as well as immunomodulatory therapy with interferon gamma (IFN-gamma). The patient improved clinically with antimicrobial therapy followed by ongoing antimicrobial prophylaxis, IFN-gamma, pioglitazone to restore efferocytosis, and wound care while undergoing evaluation for allogeneic hematopoietic stem cell transplantation.



Abstract N°: 831

Hailey-Hailey disease treated with methotrexate and botulinum toxin A

Agata Szczecina[1], Katarzyna Chyl-Surdacka[1], Adam Borzęcki[1]

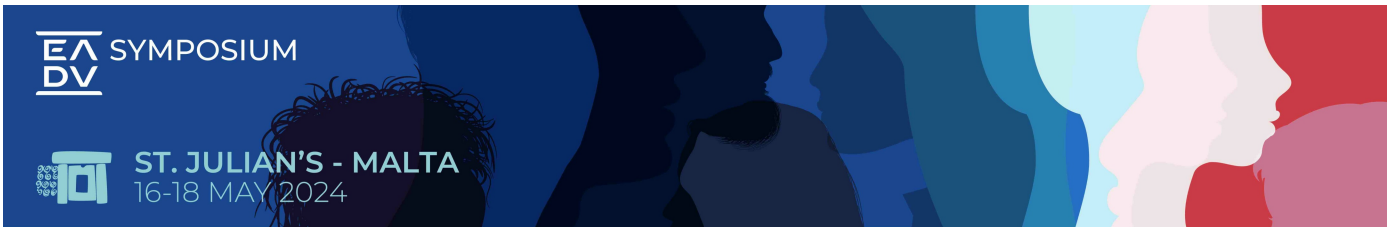
[1]Non-Public Health Care Center 'Med-Laser', Lublin, Poland, Department of Dermatology

Introduction & Objectives: Hailey-Hailey disease (HHD) is a rare genodermatosis characterized by an impaired intracellular calcium transduction. Skin lesions characteristic for the disorder usually involve armpits and groin, and often undergo secondary superinfection. The disease negatively affects patients' quality of life; moreover, its treatment is strenuous. Methotrexate is considered to be effective in HHD treatment and as a maintenance therapy. One of the exacerbating factors is increased sweating. In this regard, a promising therapeutic option is botulinum toxin A.

Materials & Methods: We present a case of a 59-year-old patient with Hailey-Hailey disease treated with methotrexate and botulinum toxin A, along with a literature review of other therapeutic methods.

Results: After botulinum toxin A treatment had been performed in the left axillary fossa, almost complete resolution of the lesions was observed. Then, methotrexate (20 mg per week) was introduced and a significant improvement of the remaining skin changes was noted. The left axillary fossa previously treated with botulinum toxin A still presented clear at the appointment nine months later. No adverse effects of this combined therapy were reported. Topical treatment of HHD usually includes strong topical corticosteroids, antibacterial and antifungal medicaments. General medications involve retinoids, dapsone, immunosuppressants, as well as some biologic drugs and low dose naltrexone. Other methods include laser therapy, photodynamic therapy and surgical treatment.

Conclusion: Treatment of Hailey-Hailey disease is symptomatic and no clear guidelines have emerged so far. Methotrexate should be considered an effective treatment modality and maintaining therapy. Botulinum toxin A may be a safe and promising adjunctive therapy for Hailey-Hailey disease.



Abstract N°: 856

Multiple spiradenomas revealing Brooke-Spiegler syndrome.

Salma Zakaryaa[1], Fouzia Hali[1], Bouchra Baghad[1], Soumiya Chiheb[1]

[1]Ibn Rochd university hospital center, Dermatology and venereology, Casablanca

Introduction & Objectives:

Brooke Spiegler syndrome is a rare genodermatosis that affects the folliculo sebaceous apocrine unit.

It's a rare genetic disease characterized by an inherited predisposition to skin tumors presenting by multiple adnexal tumors, including cylindromas, spiradenomas and trichoepitheliomas.

We report the diagnosis of a new family with Brooke-Spiegler syndrome.

Observation:

A 57-year-old female patient, treated for breast carcinoma in 2017, presented with multiple skin lesions of the face and scalp that had been evolving since the age of 30. Her father and daughter had the same type of lesions.

On dermatological examination, multiple flesh-colored papular lesions were found on the forehead, the edge of the scalp and the right wing of the nose; she also had multiple large nodular lesions of firm consistency on the scalp, predominantly on the vertex, with alopecia, as well as a nodular lesion over the zygomatic arch and a nodular lesion over the left thigh.

Her daughter presented with numerous papular lesions on the face, located on the wings of the nose and the nasolabial region, in favor of trichoepitheliomas.

Histological examination revealed a spiradenoma.

The diagnosis was Brooke-Spiegler syndrome (BSS).

The patient is due to undergo surgical excision.

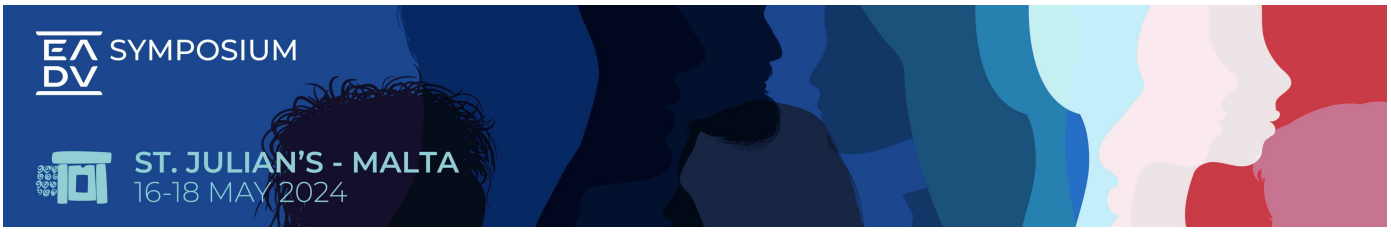
Conclusion:

Brooke Spiegler syndrome is an autosomal dominant disease due to a mutation in the CYLD gene, it's characterized by a family history of adnexal tumors including trichoepitheliomas, cylindromas and spiradenomas. If many large cylindromas appear on the head, they are termed turban tumor. It is usually a benign disease, but patients with this syndrome should be explored for malignancy.

The evolution of the disease is characterized by a multiplication of lesions; sudden growth or ulceration should raise suspicion for malignant transformation. A family study is indicated.

The treatment of adnexal tumors by CO2 laser vaporization as well as surgery are useful in the therapeutic management of patients with DBS.

This is an important diagnosis to be aware of, as it should lead to a search for malignant neoplasia, particularly basal cell carcinomas, and also a family investigation with genetic study.



Abstract N°: 875

.Pure ectodermal dysplasia of nails and hair: a new observation

Sabrina Malya Belateche[1], Mounia Slaouti[1], Mohand Ouali Ait Si Ali[1], Aïcha Salhi[1], Assya Djeridane[1]

[1]Hospital Central Army Dr Mohamed Seghir, Kouba, Algeria

Pure ectodermal dysplasia of nails and hair: a new observation

Introduction & Objectives:

Ectodermal dysplasias (ED) constitute a heterogeneous group of diseases characterized by dystrophies in the development of ectodermal structures, such as hypohidrosis, hypotrichosis, onychodysplasia, and hypodontia or anodontia. Approximately 200 distinct genetically and clinically inherited ectodermal dysplasias have been identified. Pure ectodermal dysplasia of the nails and hair is characterized by congenital onychodystrophy and severe hypotrichosis. To date, only 20 cases of pure ectodermal dysplasia of the nails and hair (PEDNH) have been reported worldwide. We present a new observation of pure ectodermal dysplasia of the nails and hair in a 2-year-old child.

Materials & Methods:

A 2-year-old child, born at full term, from first-degree consanguineous parents, and the only child, exhibited universal alopecia with complete absence of hair on the scalp, eyebrows, eyelashes, and body, accompanied by dystrophy of all twenty nails. Dermatological examination revealed total alopecia involving the scalp, eyebrows, eyelashes, and even the body. All twenty nails were dystrophic and misaligned. Teeth and sweat glands were not affected, and the general examination was normal. Trichoscopy showed a total absence of hair, including the small black dots that may correspond to hair follicles. Scalp biopsy revealed atrophic hair follicles. Genetic testing in the family was not performed.

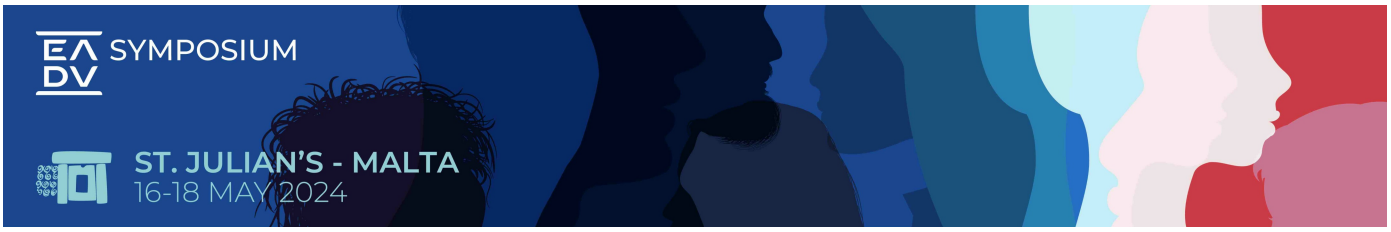
Results:

Ectodermal dysplasias are a rare group of genodermatosis affecting tissues of ectodermal origin, including hair, nails, teeth, and sweat glands. Freire-Maia and Pinheiro proposed the first classification system for ectodermal dysplasias in 1982, with additional updates in 1994 and 2001. Pure ectodermal dysplasia of the nails and hair is a very rare subtype of ED. It can be autosomal recessive or dominant, with highly variable clinical expression. Affected individuals are typically born without hair on the scalp, eyebrows, and eyelashes, and all twenty nails are dystrophic.

To date, only 20 cases of PEDNH have been reported worldwide. Mutations in the KRT85 gene were found in some patients, while mutations in the COXC13 and KRT74 genes were found in others. The clinical results in our case closely resemble those described by Naeem et al., who found a mutation in the hair matrix and cuticle keratin gene KRTHB5. The histopathological results from the scalp biopsy are similar to those published by Lin et al. Genetic analysis would be beneficial to determine the mutation in our case; unfortunately, this tool is not available in our country.

Conclusion:

The reported case was diagnosed based on clinical findings identical to those reported by Naeem et al., confirmed by trichoscopic examination, and supported by histopathological results from the scalp biopsy, resembling the findings described by Lin et al.



Abstract N°: 927

Hajdu-Cheney Syndrome: Identification of new mutation involving NOTCH 2 along with finding of filaggrin gene mutation in same patient

Santoshdev Rathod*[1], Hetal Vora[1], Ashish Jagati[1]

[1]Smt. NHL Municipal Medical College, Ahmedabad, India

Introduction & Objectives:

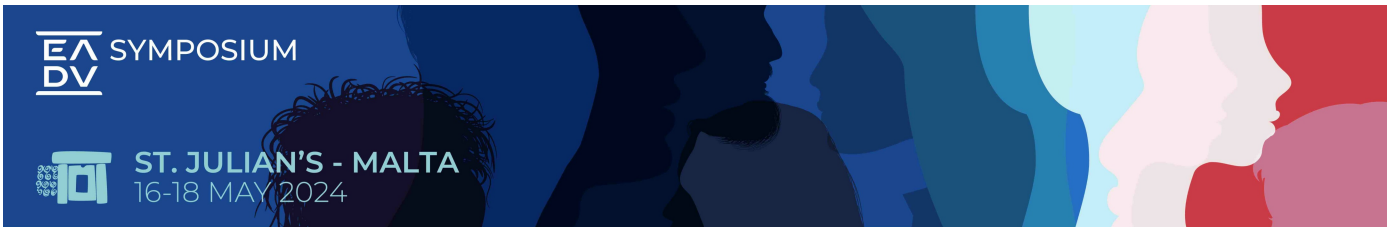
The Hajdu–Cheney syndrome (HCS) is a rare autosomal dominant disorder characterized by severe osteoporosis, acroosteolysis of the distal phalanges, renal cysts, and other abnormalities. Recently, heterozygous mutations in *NOTCH2* were identified as the cause of HCS.1 The aim of this report is to present a case of HCS with distinct clinical phenotype and a novel mutation, previously unreported according to our knowledge and literature search.

Materials & Methods:

A 9 year old female patient was admitted in the department of Pediatrics for complaints of not gaining height, no permanent dentition and recurrent respiratory tract infections. She was a first order child born to non-consanguineous marriage. On general examination, the child's growth is stunted and as she had tractional alopecia, typical facies consisting of microcephaly, depressed nasal bridge, micrognathia, hypertelorism, long philtrum, xerosis, laxity of skin folds and genu valgum deformity. Clinical evaluation and application of diagnostic tool proposed by Brennan and Pauli et al. lead to provisional diagnosis of HCS.

Conclusion:

Based on extensive search using keywords such as "Filaggrin mutation and Hajdu Cheney Syndrome", "Filaggrin mutation and Acro-osteolysis", "Filaggrin mutation and NOTCH 2 mutation association" did not produce any relevant literature. This case is the first of its kind exhibiting a mutation involving the NOTCH2 gene and the FLG gene in a patient of Hajdu Cheney syndrome. However, such association not necessarily implies a causal relationship between the two and maybe a random association. Further, clinical and genetic studies should be aimed at finding relevance of similar associations in other patients with HCS and filaggrin gene mutation.



Abstract N°: 955

Early diagnosis of Waardenberg syndrome: A case report highlighting key clinical features.

Anass Abbour[1], Fatima Zahra Elfatoiki[1], Fouzia Hali[1], Soumiya Chiheb[1]

[1]Ibn Rochd UHC, Dermatology, Casablanca , Morocco

Introduction & Objectives:

Waardenburg syndrome is a rare genetic disorder characterized by varying degree of deafness associated with pigmentary abnormalities and defects of neural crest cell derived structures. Four subtypes (I–IV) with variable penetrance and gene expression of different clinical features have been described.

We report, herein, a 2-year-old girl showing constellation of heterochromia, dystopia canthorum and white forelock.

Materials & Methods:

Results:

A 2-year-old girl presented to our department with white forelock on the anterior scalp present since birth. She was the second child of a non-consanguineous marriage with a healthy sibling. Her birth and developmental history did not reveal anything significant. Clinical examination showed a centrally placed white forelock in frontal area without any associated depigmentation of the scalp or elsewhere on the body. Her ENT and abdominal examinations were normal. Ophthalmological examination demonstrated heterochromia iridium and dystopia canthorum. However, sensorineural examination in search of deafness as well as skeletal investigation revealed no abnormalities.

The patient was diagnosed as Waardenburg syndrome type I with these findings.

Conclusion:

Waardenburg Syndrome (WS) is a rare autosomal genetic disorder characterized by achromia of the hair and the skin, congenital deafness, partial or total heterochromia iridis, hypertrichosis of the medial part of the eyebrows (Synophrys), broad and high nasal root and dystopia canthorum (Increase in the distance between the inner canthi with normal inter-pupillary distance). There are five major and five minor criteria for Waardenburg syndrome. Major criteria include sensorineural hearing loss, iris pigmentary abnormality, hair hypopigmentation, dystopia canthorum and first-degree relative previously diagnosed with Waardenburg syndrome. Minor criteria include skin hypopigmentation, medial eyebrow flare (Synophrys), broad nasal root, hypoplasia alae nasi, and premature greying of the hair.

There are four clinical subtypes of Waardenburg depending on the presence of various clinical features:

Type I Waardenburg syndrome, caused by mutations in the *PAX3* gene, is characterized by evidence of dystopia canthorum and the full symptomatology of the disease. They also have a narrow nose, marked hypoplasia of the nasal bone, short philtrum, and short and retro positioned maxilla.

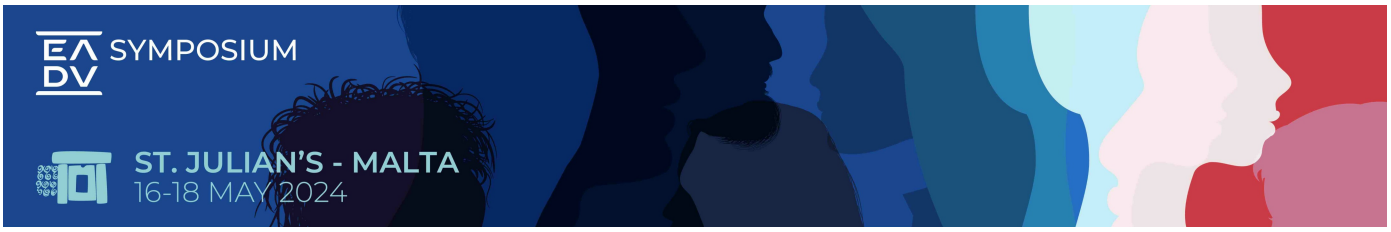
Type II Waardenburg syndrome is due to mutations in the *MITF* and *SNAI2* genes and is heterogeneous group with normally located canthi (without dystopia canthorum). Sensorineural hearing loss and heterochromia iridium are the 2 most important diagnostic indicators for this type.

Type III Waardenburg syndrome (Klein-Waardenburg syndrome) is similar to type I but is also associated with musculoskeletal abnormalities.

Type IV Waardenburg syndrome (Shah-Waardenburg syndrome) is the association of Waardenburg syndrome with

Hirschsprung disease. Mutations in the *SOX10*, *EDN3*, or *EDNRB* genes cause type IV Waardenburg syndrome.

We hope that our case will help raising clinicians' awareness when coming across a child with blue eyes and white forelock: A hearing evaluation must be done at first instance to prevent psychological and intellectual development.



Abstract N°: 959

Junctional epidermolysis bullosa with squamous cell carcinoma and systemic complications

Miodrag Davidovic[1], Cristina Has[1]

[1]University of Freiburg, Dermatology, Freiburg, Germany

Introduction & Objectives:

Junctional epidermolysis bullosa (JEB) is a genetically heterogeneous group of rare blistering disorders with skin cleavage at the level of the basement membrane. Our cohort comprises 22 patients with intermediate JEB with pathogenic variants in the genes encoding laminin 332 and residual protein expression. Here we report on the severe course in a young woman with JEB intermediate.

Materials & Methods:

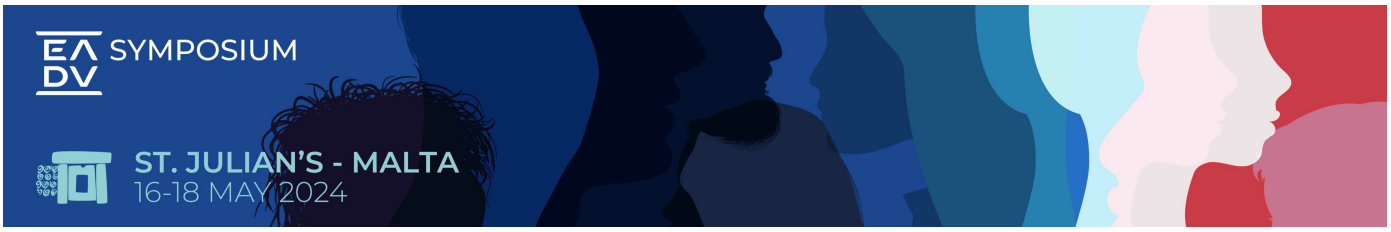
Molecular and genetics diagnostics of EB, clinical follow-up visits, laboratory diagnostics, skin biopsy and histopathology as well as imaging were performed.

Results:

The 34-years old woman with intermediate junctional epidermolysis bullosa had reduced laminin 332 due to compound heterozygous LAMB3 mutations, c.1132+5G>A;c.1628dupG; p.?;p.C546Lfs*20. Chronic wounds and extensive scarring on the back, shoulders, sternum and hips dominated her cutaneous manifestations. On the upper back on a site of a large scar, she developed a large (8x10 cm) ulcerative well-differentiated squamous cell carcinoma, 7.5 mm vertical depth, G1 Clark level V. Staging showed the deep infiltration of the tumor in the soft tissue and pathologically augmented lymph nodules in the left axilla. Large complete excision was performed and lymph node biopsy that demonstrated no malignant infiltration. Besides, the patient was cachectic (BMI 15.9 kg/m^2), had severe anemia (Hb 4.7 g/dl), and chronic renal failure (cystatin c 1.37 mg/l, eGFR 54 ml/min, microhaematuria). Immunological parameters were in the normal range, but IL-6 (47.5 pg/ml) and alpha amyloid (533 mg/l, normal range <10mg/l) were strongly elevated suggesting that the kidney damage was linked to chronic inflammation. A kidney biopsy to demonstrate kidney amyloidosis was not performed because of the invasive extensive surgery the patient was submitted to, and the overall impairment of her quality of life.

Conclusion:

Both squamous cell carcinomas and kidney damage are common in patients with severe dystrophic EB but uncommon in junctional EB. In the UK cohort of squamous cell carcinoma in patients with junctional EB the median age at diagnosis was 40.6 years and in the Dutch cohort in the range of 52.9 - 61 years, which is higher age than in the case of our patient. Furthermore, this is the first case of junctional EB with kidney involvement in our cohort. These findings suggest that chronic skin damage and inflammation may cause earlier manifestation and more severe uncommon complications in junctional EB patients. Therefore regular clinical and laboratory follow up-examinations and screenings are essential for early diagnosis and prevention of complications.



Abstract N°: 1037

The H Syndrome: An Underrecognized Genomic Disorder

Malek Cherif*[1], Emna Bahloul[1], Kmar Turki[1], Khadija Sellami[1], Fatma Hammemi[1], Mariem Amouri[1], Abderrahmen Masmoudi[1], Hamida Turki[1]

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Introduction & Objectives:

H syndrome (HS) is a rare autosomal recessive genodermatosis caused by mutations in SLC29A3.

The aim of this study is to assess the clinicopathological features of HS.

Materials & Methods:

We conducted a descriptive retrospective study over 30 years, including all patients diagnosed with HS in our department.

Results:

Nine patients (7F/2M) were included with 7 having consanguineous parents and 2 with family history of similar symptoms. Symptom onset average age was 11.1 years.

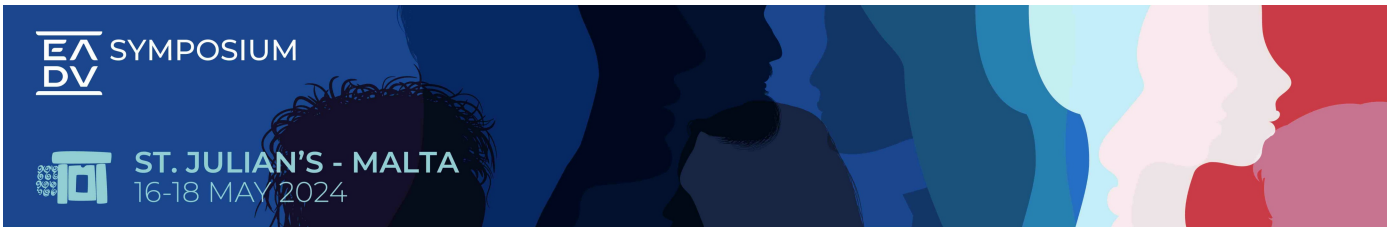
Hearing loss was diagnosed in 5 patients. All patients exhibited symmetrical cutaneous hyperpigmentation, induration, and hypertrichosis. One patient presented symmetrical erythematosquamous plaques on the cheeks with histopathology confirming histiocyte infiltrate. Clinical examination revealed hepatomegaly (in 2 patients), splenomegaly, and inguinal adenopathies (in one patient each). Other findings included hallux valgus, camptodactyly, and gerontoxon (each observed in 5 patients). Subcutaneous tissue infiltration was noted in 3 patients, and retroperitoneal fibrosis in one patient.

The average CRP level was 92 mg/l, and ESR was 98 mm/h. Hypogonadism was noted in 5 cases. Only 3 cases had elevated ANA titers. Echocardiography revealed pericardial effusion (in 2 patients), ventricular wall hypertrophy (in 1 patient), and tricuspid regurgitation (in 2 patients). Histopathologic findings included epidermal basal hyperpigmentation (in 5 patients), dermal fibrosis (in 4 patients), and histiocytic infiltrate expressing CD68 (in 6 patients). A homozygous SLC29A3 gene mutation (p.R363Q and c.1088G>A) was isolated in one patient, while others are still under study.

Conclusion:

HS, a rare genodermatosis, primarily affects consanguineous Arab families. It presents with distinctive skin manifestations, including bilateral hyperpigmentation, hypertrichosis, and sclerosis, often accompanied by joint deformities and hypoacusis. Our series stands out the frequent presence of osteoarticular malformations, ophthalmological, and cardiac manifestations, as well as subcutaneous tissue infiltration. A novel cutaneous sign, erythematous-keratotic plaques on the cheeks, was observed in a patient with skin histology confirming a non-Langerhans histiocytic origin. Additionally, we documented a case of retroperitoneal fibrosis, which has been described in the literature.

Molecular biology, specifically the SLC29A3 gene mutation, serves as the definitive diagnostic tool. However, the efficacy of treatments for HS remains inconclusive.



Abstract N°: 1064

Rickets-Alopecia syndrome (Vitamin D-dependent rickets type II with Alopecia)

Joe Khodeir*[1], Hala Abi Rached[2]

[1]University of Balamand, Saint Georges Hospital Medical Center , Dermatology, Lebanon,[2]Saint Georges University of Beirut, Saint Georges Hospital Medical Center, Dermatology, Lebanon

Introduction & Objectives:

Vitamin D-dependent rickets type II-A (VDDR2) is a rare inherited autosomal recessive disorder known as Rickets-Alopecia syndrome. Genetic mutation results in a defect in the vitamin D receptor (VDR), leading to target resistance to 1.25-dihydroxy vitamin D. As a result, VDR cannot regulate gene activity, even with normal amounts of vitamin D in the body. Resulting in alopecia, hypocalcemia, hypophosphatemia, secondary hyperparathyroidism, and rickets.

Materials & Methods:

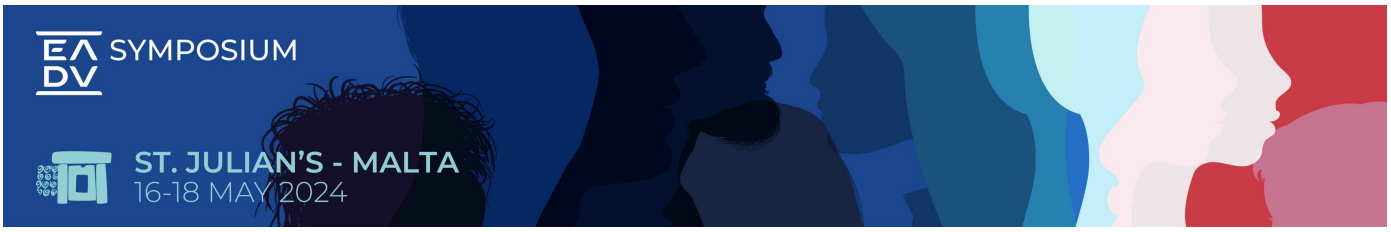
This is the case of a 10 months old baby girl, who presented to the dermatology clinic for absent hair growth on her scalp since birth. Physical exam showed occasional few anagen hair on her scalp with absent hair on eyebrows and few hairs on eyelashes. The rest of the exam showed no nails dystrophy, teeth abnormalities, palmoplantar keratoderma, facial bone abnormalities and no facial or body papules. The parents report no history of hypo-hidrosis or heat intolerance. Prominent frontal bossing with increased head diameter was seen. Dermoscopy demonstrated normal hair shafts. On the review of system there was no history of seizures, mental retardation or difficulty walking. Her parents happened to be from the same village, with no consanguinity. They report having 2 family relatives with absent hair since birth. History and physical exam were enough to rule out congenital atrichia with facial papules and ectodermal dysplasia. However, an underlying metabolic disorder was suspected. For this reason, the patient was referred for whole exome sequencing, which was positive for “vitamin D receptor VDR gene - homozygous mutation”. This led us to the diagnosis of Vitamin D-Dependent Rickets Type II with Alopecia. Total bone X-rays of the wrists, knees, hips and hands were ordered and turned normal. However, laboratory investigations were pertinent for low vitamin D level 17 ng/ml, high alkaline phosphatase level: 532 (normal 50-136 IU/L), very high parathyroid Hormone level: 800 (normal < 60 pg/ml). The patient was started on oral 1-alpha-hydroxy vitamin D3 with high dose of oral combination of calcium carbonate, cholecalciferol and magnesium oxide.

Results:

Genetic mutation in VDDR2, located on chromosomes 12, leads to a defect in the vitamin D receptor (VDR). VDDR2 appears to be more frequently documented in Arab populations, due to the high incidence of the disease’s gene and the elevated rate of consanguineous marriages. Depending on the presence or absence of alopecia, it is further classified as VDDR type IIA or IIB, respectively. It manifests with complete body hair loss and the development of rickets in the latter part of the first year of life. Alopecia presents in first few months of life and advances to alopecia totalis by childhood and is typically refractory to management. Lack of the VDR leads to increased expression of the hairless (*Hr*) protein that regulates hair follicle cycling. Alopecia is associated with the most severe forms of VDDR2, with early onset of hypocalcemia and poorest response to therapy. Mild-to-moderate cases are managed by high doses of oral calcitriol and supplemental calcium. Severe cases need the administration of intravenous calcium infusion.

Conclusion:

Vitamin D-dependent rickets type II A is a very rare disorder, with only a few cases being reported in the English literature. The role of the dermatologist is very important in the prompt diagnosis of the disease since alopecia is the earliest manifestation of the disease even before rickets development.



Abstract N°: 1068

Dermatology's Diagnostic Role in Unraveling Rare Pediatric Genetic Disorders

Georgia Pappa[1], Garyfallia Syridou[2], Evridiki Tsoureli Nikita[1], Dimitrios Kalantzis[3], Panagiota Kouaki[2], Eftychia Kitsiou[1], Anastasia-Rafaela Triantafyllou[2], Styliani Kokoris[3], Vasiliki Papaevangelou[2], Alexander Katoulis*[1]

[1]2nd Department of Dermatology and Venereology, National and Kapodistrian University of Athens, Medical School, "Attikon" General University Hospital, Athens, Greece, [2]3rd Department of Pediatrics, National and Kapodistrian University of Athens, Medical School, "Attikon" General University Hospital, Athens, Greece, [3]Laboratory of Hematology and Blood Bank Unit, National and Kapodistrian University of Athens, Medical School, "Attikon" General University Hospital, Athens, Greece

Introduction & Objectives:

Chediak-Higashi syndrome, a rare autosomal recessive disorder attributed to a lysosomal trafficking regulator (LYST) protein defect, is characterized by distinct clinical features including oculocutaneous albinism, recurrent infections, and neurological deterioration. Dermatological evaluation is pivotal, serving as a crucial diagnostic aid and fostering a comprehensive understanding of rare genetic disorders.

Materials & Methods:

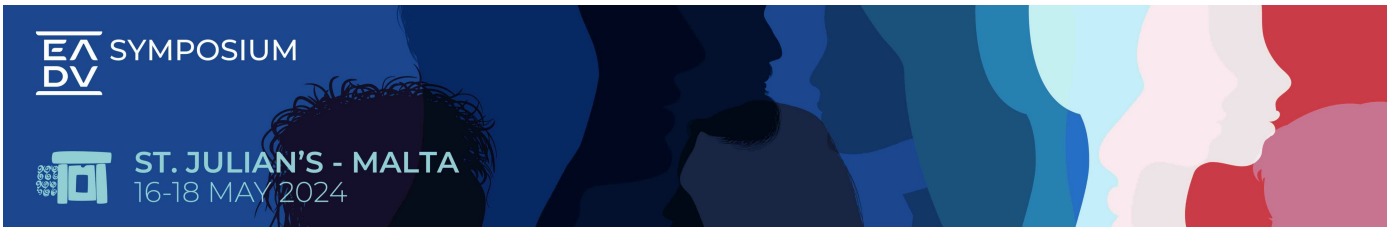
We present a compelling case of a 3.5-year-old girl admitted to the Pediatric Department with hyperpyrexia, elevated inflammatory markers, and mild neutropenia.

Results:

The clinical history was relatively unremarkable, apart from multiple, albeit mild infections, especially of the upper respiratory tract, occurring over the preceding six-month period. Clinical examination yielded no pathological findings, but the hematological assessment uncovered Chediak-Higashi-type granules— large cytoplasmic inclusions— within neutrophils, evident in the peripheral blood smear. Subsequently, a referral to the Dermatological Department was initiated to discern and identify phenotypic characteristics of Chediak-Higashi syndrome. The dermatological examination did not reveal the anticipated oculocutaneous albinism or spotted skin hypopigmentation as described in the literature. Contrarily, a Fitzpatrick skin type II was identified, accompanied by exceptionally pale skin and distinctly blonde hair exhibiting an unusual silvery hue, a feature present since early childhood and deviating from parental traits. Intrigued by these subtle yet distinctive indicators, we conducted a thorough examination, including the collection of hair samples. Under light microscopy, the hair mount revealed large aggregates of pigment granules distributed regularly. This finding is consistent with the diagnostic characteristics of Chediak-Higashi syndrome, alongside other similar conditions like Griscelli, Elejalde or Hermansky-Pudlak syndromes. However, a definitive diagnosis can only be established through genetic testing.

Conclusion:

This case underscores the pivotal role of interdisciplinary collaboration in elucidating complex genetic disorders. Moreover, it highlights the diagnostic value of dermatological observations, emphasizing their significance in the broader medical context.



Abstract N°: 1104

About a rare association of Xeroderma pigmentosum and classic hodgkin lymphoma

Hajar Tahiri[1], El Fatoiki Fatimazahra[1], Marnissi Farida[2], Hali Fouzia[1], Chiheb Soumiya[1]

[1]Ibn rochd university hospital , Dermatology, Morocco,[2]Ibn rochd university hospital , pathological anatomy, Morocco

Introduction & Objectives:

Xeroderma pigmentosum (XP) is a rare recessive genetic disorder characterized by extreme hypersensitivity to ultraviolet rays and predisposing individuals to various malignancies. Here, we present a case study of a 30-year-old patient with Xeroderma pigmentosum who was diagnosed with classic Hodgkin lymphoma, adding to the limited literature on this rare occurrence

Materials & Methods:

A 29-year-old patient, one of two siblings born from a consanguineous marriage, was diagnosed with Xeroderma pigmentosum at the age of 1 year and has undergone six surgeries for cutaneous carcinoma.

Upon admission to our department, he complained of fever, weight loss, and night sweats persisting for the past month. General examination revealed a febrile patient with lymphadenopathy clustered in the cervical, axillary, and bilateral inguinal regions. Dermatological examination showed poikilodermic lesions on the face and limbs, multiple solar lentigines, and freckles on the face and scalp. Additionally, there was a nodular lesion on the lower left eyelid and destruction of the nasal cartilage with obstruction of the left nostril. Pigmented nodular lesions with a pearly border were noted on the scalp.

Laboratory investigations revealed normochromic normocytic anemia, lymphopenia, and elevated LDH. Peripheral blood smear and bone marrow aspiration showed no dysplastic features or blasts. Tuberculosis screening was negative. Positron Emission Tomography scanning demonstrated diffuse nodal hypermetabolism.

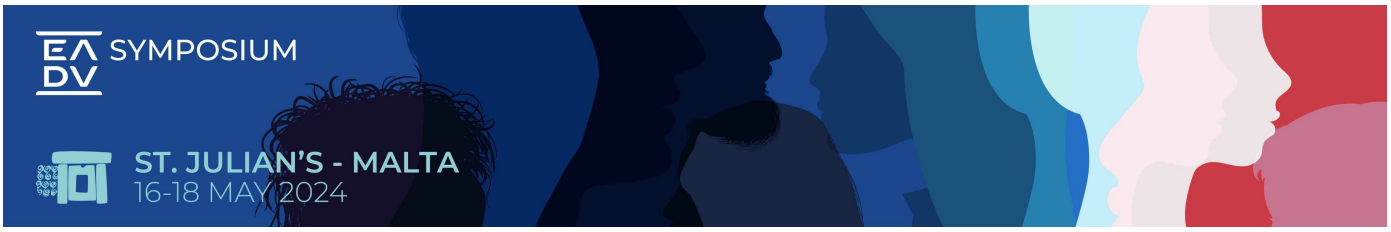
A lymph node biopsy confirmed classical Hodgkin lymphoma, with tumor cells expressing CD20, CD15, CD30, and weakly expressing PAX5 but not CD3 or LMP1. The patient was referred to a hematological establishment for specialized management. Additionally, due to the rapid progression of the nodular lesion on the left eyelid, he underwent enucleation of the left eye, with histological findings consistent with squamous cell carcinoma

Conclusion:

The particular aspect of our case is the occurrence of classic Hodgkin lymphoma in a patient with Xeroderma pigmentosum (XP).

XP is a rare, autosomal recessive disorder characterized by extreme sensitivity to minimal sun exposure due to a deficiency in the nucleotide excision repair system. This deficiency results in an elevated occurrence of somatic mutations, leading to a significantly higher frequency of skin cancers at an early age. However, the lack of nucleotide excision repair in XP patients also predisposes them to a heightened risk of tumors in tissues not exposed to sunlight, such as gynecological tumors, brain tumors, thyroid tumors, and hematological tumors, with acute leukemia being predominant.

The management of hematologic malignancies in patients with defective DNA repair pathways requires careful consideration. While it is theoretically possible that the lack of nucleotide excision repair could render chemotherapy drugs more efficient in treating tumors, in practice, chemotherapy in XP patients can be overly toxic. The chemotherapy's efficacy in killing both cancerous and normal cells can lead to significant toxicity.



Abstract N°: 1370

Phaneric involvement in Clouston syndrome : Three familial cases.

Meryame Hammouch[1], Fatima-Zahra El Fatoiki[1]

[1]CHU ibn rochd, dermatology, casablanca, Morocco

Introduction & Objectives:

Clouston syndrome is an autosomal dominant inherited disease characterized by manifestations involving the appendages, particularly consistent involvement of the nails, alopecia, and frequent palmoplantar keratoderma. In this study, we describe the cases of three members of the same family with Clouston syndrome.

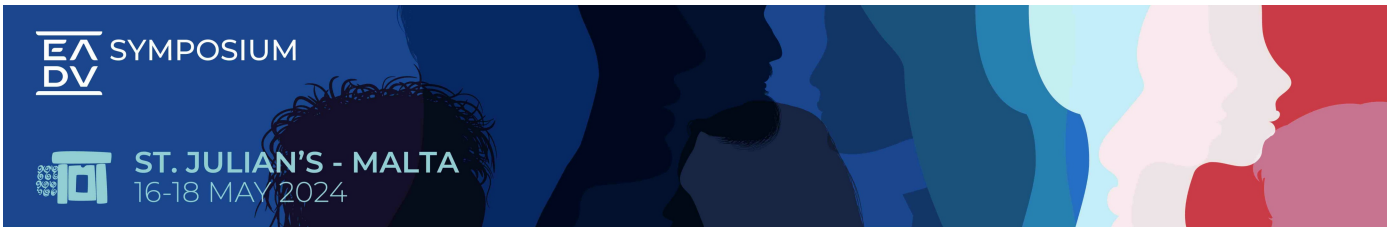
Case report:

The three cases studied include an eleven-year-old girl, a two-year-old boy, and their father. All of them presented with alopecia with fine and brittle hair, sparse eyelashes and eyebrows, nail dystrophy, palmoplantar keratoderma, poikiloderma in the axillary, inguinal, subumbilical folds, and at the neck level, as well as dental abnormalities. The symptoms were present from birth, but sweating and intellectual development were normal.

Conclusion:

Clouston syndrome, also known as hidrotic ectodermal dysplasia type 2, is a rare genetic disorder with autosomal dominant inheritance. It is primarily characterized by a triad of symptoms: alopecia, nail dystrophy, and palmoplantar keratoderma. Affected patients have dry, fine, and brittle hair, which can lead to total alopecia. Eyebrows and eyelashes may be absent or sparse. Palmoplantar keratoderma is generally widespread, and some cases may also present photosensitivity. However, sweating remains normal, and physical and psychomotor development is generally normal. In the case of the three patients in our study, in addition to the classical triad of Clouston syndrome, including alopecia, nail dystrophy, and palmoplantar keratoderma, we also observed poikiloderma in skin folds and dental anomalies.

In conclusion, Clouston syndrome can present with variable manifestations and may be confused with other forms of hair dysplasia. Proper management and regular follow-up are necessary for these patients to address symptoms and prevent potential complications.



Abstract N°: 1371

Neurofibromatosis type 1-like phenotype in a carrier of germline pathogenic variant in cyclin-dependent kinase inhibitor 2A (CDKN2A)

Vanesa Koracin*[1], Barbara Perić[2]

[1]General hospital Novo mesto, Department of Dermatovenereology, Novo mesto, Slovenia,[2]Institute of Oncology Ljubljana, Department of Surgical Oncology, Ljubljana, Slovenia

Introduction & Objectives:

CDKN2A (cyclin-dependent kinase inhibitor 2A) is a tumor suppresor gene encoding two products, protein p14 and p16. Germline pathogenic variants in it are detected in 38% of melanoma-prone families. The carriers are prone to develop cutaneous melanoma (CM) at an early age, and more likely develop multiple primary CM. Pancreatic cancer, breast cancer and upper respiratory tract cancers can occur more frequently in affected individuals and their family members.

Pathogenic variants in *CDKN2A* are responsible for familial atypical multiple mole melanoma syndrome (FAMMM), as well as melanoma-astrocytoma syndrome (MAS), with co-occurring malignant and benign neural tumors. According to latest studies, a neurofibromatosis type 1 (NF1) -like phenotype (clinical diagnosis in the absence of *NF1* genetic alterations) was observed in multiple patients with MAS.

We report a case of multiple neurofibromas in a patient with germline pathogenic variant in*CDKN2A*.

Materials & Methods:

33-year old patient with positive family history (sister and mother died from CM at age 41 and 35) and multiple mole syndrome was reffered for excision of three atypical nevi in 2013. He had regular follow-up appointments with dermatologist since the age of 24. He was otherwise healthy. At the age of 21 he had a retroperitoneal low-malignant leiomyosarcoma or neurofibroma removed. Three excised lesions on his back revealed three CM (one *in situ*, one Breslow 1.3 mm and the third Breslow 0.6 mm).

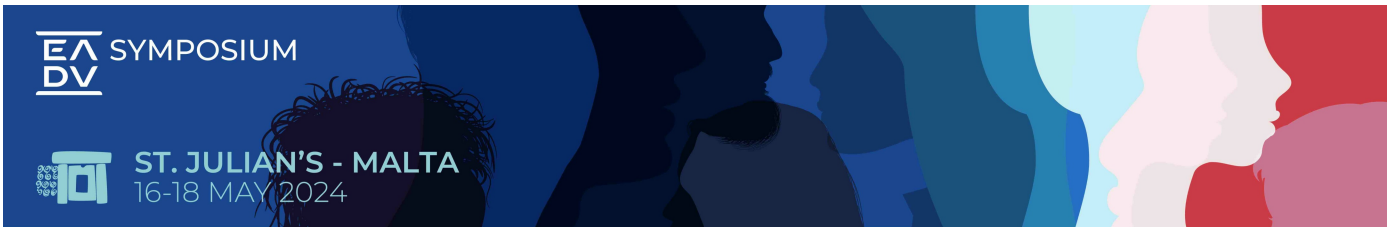
In 2019 tumor in right parailiacal space along the course of nerve L5-S1 was discovered. Histopathological examination suggested neurofibroma or nerve sheath tumor. The patient did not meet clinical diagnostic criteria for NF1. His mother and sister who died from CM also did not express the NF1 phenotype.

Results:

Gene testing was performed in 2014 using PCR on a sample of peripheral blood. A germline pathogenic variant C.151-1G>A in gene *CDKN2A* was discovered, *CDK4* and *MC1R* pathogenic variants excluded. Patient's sister was proven as carrier of the same pathogenic intron variant. In 2021 NGS was performed - patient, his son and daughter were proven to bare pathogenic variant C.151-1G>A in gene *CDKN2A*. Germline pathogenic variants in gene *NF1* were excluded.

Conclusion:

NF1-like phenotype can occur in carriers of pathogenic variants in*CDKN2A*. Genetic testing for pathogenic variants in *CDKN2A* is recommended, when the germline pathogenic variants in*NF1* are excluded. Further studies are required to establish pathogenetic correlation between the entities.



Abstract N°: 1372

Two cases of atopic dermatitis with pigmentary modifications associated with Seckel syndrome: a rare entity

Meryame Hammouch[1], Fatima-Zahra El Fatoiki[1]

[1]CHU ibn rochd, dermatology, casablanca, Morocco

Introduction & Objectives:

Seckel syndrome is an extremely rare autosomal recessive disorder characterized by pediatric microcephaly. It involves significant intrauterine growth retardation, microcephaly, facial dysmorphia, and intellectual disability. We report two unusual cases of two brothers with Seckel syndrome associated with atopic dermatitis.

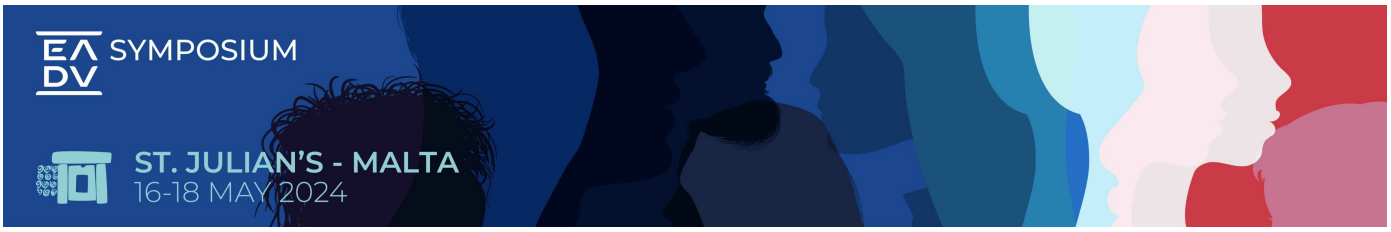
Case report:

These are two male siblings aged six and twelve, respectively, born from a first-degree consanguineous marriage, presenting with microcephaly, facial dysmorphia, and psychomotor delay. Clinical examination revealed two conscious but restless children with characteristic facial dysmorphia, including microcephaly, a low and receding forehead, a proportionally larger nose, and small, closely set eyes with blepharophimosis. Dermatological examination of the younger child showed generalized cutaneous xerosis, pruritic eczematous lesions, diffuse hyperpigmentation, fissured cheilitis, palpebral hyperpigmentation associated with blepharitis, and leukonychia of the fingernails and toenails. In the second child, less intense cutaneous xerosis was observed, along with chronic pruritus, pigmentation of the knees, blepharitis, and leukonychia of the nails.

Conclusion:

Seckel syndrome, first defined by Seckel in 1960, is a rare autosomal recessive disorder with no gender predilection, with a reported incidence of 1 in 1,000,000 live births. In most cases, the diagnosis of Seckel syndrome is based on key features, including severe intrauterine growth retardation, microcephaly, a characteristic “bird-like head” profile, and intellectual disability. In both presented cases, the diagnosis of Seckel syndrome was established based on the medical history, developmental delay, and clinical and radiological characteristics. To date, three responsible genes are located on chromosome 3 (3q22-q24) for Seckel 1, chromosome 18 (18p11.31-q11) for Seckel 2, and chromosome 14 (14q21-q22) for Seckel 3. This syndrome is associated with skeletal, neurological, ophthalmological, cardiac, and hematological impairments. However, rare cases reported in the literature mention dermatological involvement, as observed in our patients.

Seckel syndrome is a rare disorder. Its diagnosis is primarily clinical and can be made prenatally, with management predominantly focused on symptomatic treatment.



Abstract N°: 1412

Urbach-Wiethe lipoid proteinosis: a rare geondermatosis

Billel Merrouche[1], Houria Sahel[1]

[1]Chu Maillot, Dermatolgy, Algiers, Algeria

Introduction & Objectives:

Urbach-Wiethe disease, also known as hyalinosis cutis-mucosae, is a very rare, autosomal recessive inherited disorder. The gene involved (ECM1) has recently been identified. We report a new case.

Materials & Methods:

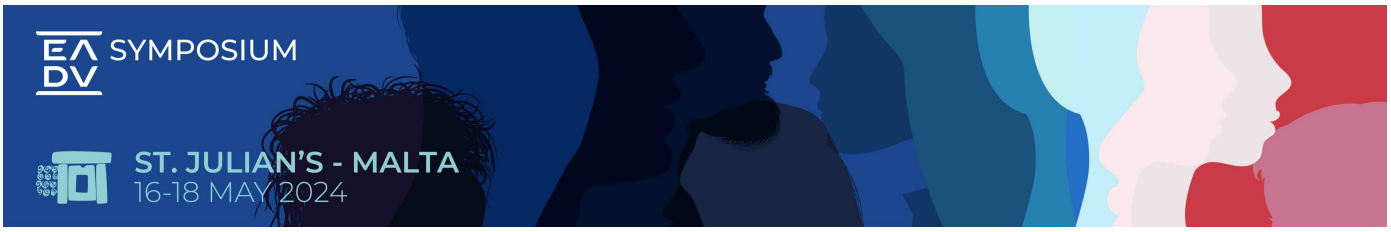
A 4-year-old male child of 2nd degree consanguineous parents presented with extensive erosive lesions, evolving in flare-ups since the age of 9 months, giving way to pseudo-varioliform scarring. Examination of the oral mucosa revealed a depilated tongue with thickened lips. There was a delay in height and weight. The rest of the clinical examination revealed a hoarse voice since the age of 6 months. Examination of the ENT sphere by nasofibroscopy revealed thickening of the ventricular bands of the larynx. Ophthalmological and neurological examinations were unremarkable. Questioning revealed the presence of 2 similar cases in the siblings. The diagnosis of Urbach-Wiethe disease was raised, and histological studies of skin and labial mucosa biopsies, in search of hyaline deposits, are in progress.

Results:

Urbach-Wiethe lipoid proteinosis is a very rare autosomal recessive overload genodermatosis. In the literature, around 500 cases have been reported to date. However, this frequency appears to be underestimated, given the number of unpublished cases and the frustrated forms that have gone unnoticed. It affects both men and women. It is most often revealed in the first few months of life by hoarseness of the voice. Clinical signs are dominated by varioliform scarring following erosions. Mucosal damage is mainly to the larynx and mouth (tongue, lips). The latter is responsible for feeding difficulties, which explains the delayed growth and weight. Other manifestations may also occur, in particular ophthalmological, in the form of an almost pathognomonic moniliform blepharosis, and neurological.Anatomopathologically, the disease is characterised by the deposition of a hyaline, eosinophilic amorphous substance in the skin, mucous membranes and several internal organs. The affection is generally benign. However, laryngeal involvement can be severe and life-threatening..

Conclusion:

Our observation reproduces the main semiological features of Urbach-Wiethe lipoido-proteinosis. This pathology should be suspected in the presence of varioliform scars associated with hoarseness of the voice.



Abstract N°: 1433

Congenital generalized hypertrichosis associated with juvenile gigantomastia: Association of two rare conditions

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[1]Chu Maillot, Dermatolgy, Algiers

Introduction & Objectives:

Hypertrichosis refers to excessive hair growth in areas that are not primarily androgen-dependent. It may be localised or generalised, congenital or acquired. We report a family case of congenital generalized hypertrichosis** (CGH) associated with juvenile gigantomastia.

Materials & Methods:

A 22-year-old woman, born to consanguineous parents ,with a family history of CGH associated with gigantomastia (affecting her sister, aunts and cousins on her father's side).

She was born with CGH, which worsened with age, forcing her to interrupt her education . At the age of 12, she developed bilateral asymmetric gigantomastia extending to the umbilical region. She subsequently underwent reduction mammoplasty, accompanied by postoperative Tamoxifen treatment. An anatomopathological study of the surgical specimen showed bilateral adenofibromas with florid adenosis on gigantomastia. In view of the recurrence of the gigantomastia, a second mammoplasty was performed at the age of 21, combined with spironolactone, but without improvement.

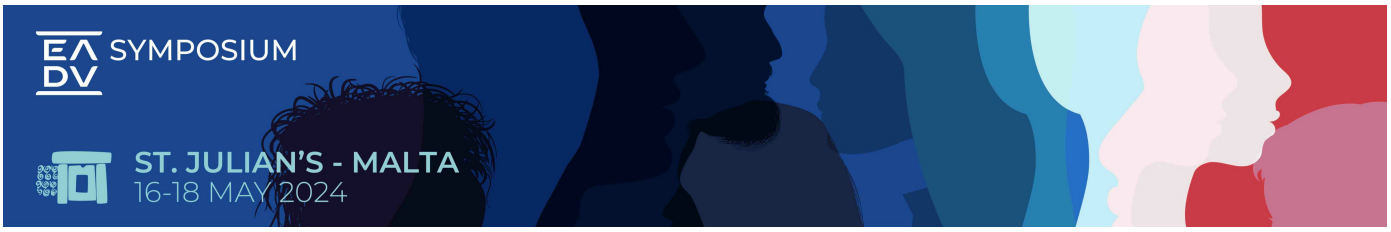
Clinical examination showed a BMI of 22.35 kg/cm2 , and diffuse hypertrichosis consisting of long, thick pigmented terminal hairs, sparing the hands and feet. A coarse face with bushy, dark eyebrows; a broad and thickened lips .Axillary and pubic appeared normal. Both breasts were large, pendulous and asymmetrical. The external genitalia appeared normal. There were no obvious signs of virilisation ,. Endocrine tests (cortisol, prolactin, testosterone, LH-FSH, oestradiol and TSH) were normal. Pelvic ultrasound showed a solid latero-uterine nodule. Pelvic MRI is in progress.

Results:

CGH is a rare entity. It is most often idiopathic, linked to excessive stimulation of hair follicles with normal androgen levels. Clinical diagnosis is common, but a thorough physical examination is essential to identify potential extra-cutaneous abnormalities, obesity or intellectual disability. Depending on the clinical symptoms, biological tests, bone X-rays, brain MRI, EEG, ECG and psychometric tests may be useful.Juvenile gigantomastia is also a rare condition and its association with several disorders such as liver failure, psychomotor retardation, ataxia, myasthenia gravis, and D-penicillamine treatment, has been reported .However,our patient had none of these associations. Two cases of association of CGH with gigantomastia have been reported in the literature, associated with gingival hypertrophy and cardiomyopathy. This was not the case in our patient.The need for CGH treatment depends on the patient's age, the location and the degree of hypertrichosis as well as the psychosocial impact. Various methods are recommended, including shaving (conventional/electrical), hair removal, electrolysis and laser hair removal. In our patient's case, laser sessions were chosen.

Conclusion:

The combination of CGH and gigantomastia is rare.Its socio-psychological impact encourages a better understanding of its pathogenesis and the development of pharmacological treatments aimed at making these anomalies less disabling.



Abstract N°: 1482

KLICK syndrome: an unrecognized form of congenital ichthyosis.

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Introduction & Objectives: The KLICK syndrome is a rare autosomal recessive genodermatosis, which belongs to the group of hereditary ichthyoses, characterized by an abnormality in epidermal keratinization. We report a new case.

Observation :

A 21-year-old patient, with a history of first-degree consanguinity, presented with localized hyperkeratosis around the large joints with skin peeling present since birth. On dermatological examination, fine scaling was noted over the entire body surface, along with linear and symmetric hyperkeratotic plaques, sometimes fissured, located in all flexion folds and around the elbows and knees. These were associated with sclerosing palmoplantar keratoderma, with narrowing of the fingers and the formation of circular constriction bands or pseudo-ainhum. The scalp, nails, and mucous membranes were not affected. No associated extracutaneous signs were found. Skin biopsy from the antecubital region revealed orthokeratotic hyperkeratosis with hypergranulosis associated with predominantly lymphocytic dermal inflammatory infiltrate. The diagnosis of KLICK syndrome was made based on the triad of transgressive sclerosing palmoplantar keratoderma, congenital ichthyosis, and linear hyperkeratotic plaques, which was confirmed by histology. Genetic testing was not performed. The patient was treated with local keratolytics and acitretin with significant improvement.

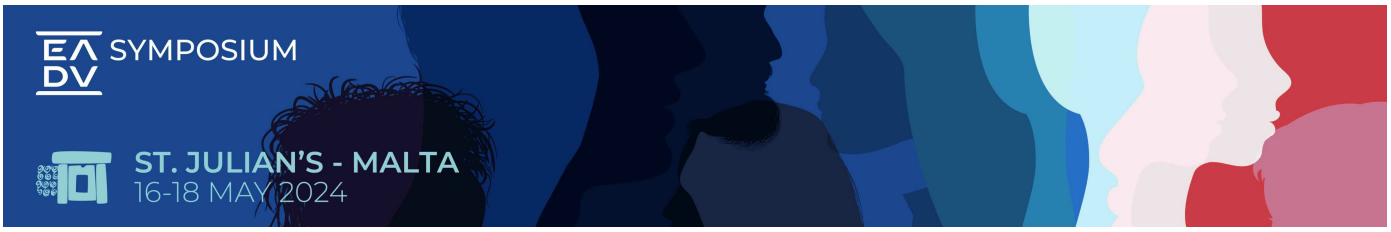
Conclusion:

The acronym KLICK stands for Keratosis linearis with ichthyosis congenita and sclerosing keratoderma, due to a mutation in the gene encoding the proteasome maturation protein (POMP). The prevalence is unknown, with approximately 20 reported cases.

KLICK syndrome is characterized by the combination of transgressive palmoplantar keratoderma, often sclerosing, with congenital ichthyosis and linear hyperkeratotic plaques typically localized in flexural regions and armpits without other associated anomalies.

Histopathology reveals epidermal acanthosis, hypergranulosis, and hyperkeratosis with mild infiltration of inflammatory cells in the upper dermis. Electron microscopy shows numerous keratohyalin granules in the keratinocytes of the granular layer.

Treatment involves the use of keratolytics and oral retinoids. However, relapse occurs once treatment is discontinued. It is important for clinicians to be aware of atypical presentations of transgressive forms of palmoplantar keratoderma in order to make accurate diagnoses and offer appropriate treatments.



Abstract N°: 1506

Mortality in Dystrophic Hereditary Epidermolysis Bullosa within the region of Sfax

Kmar Turki[1], Khadija Sellami[1], Fatma Hammemi[1], Rim Chaabouni[1], Emna Bahloul[1], Hamida Turki[1]

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Introduction & Objectives:

Dystrophic Epidermolysis Bullosa (DEB) can be responsible for early death, particularly in severe generalized recessive forms (RDEB-GS). In this report, we share our insights into the circumstances surrounding mortality in DEB.

Materials & Methods:

We conducted a retrospective study between 1987 and 2023 enrolling all cases of mortality among patients with DEB. For each case, we specified the clinical subtype of DEB, the age, and the cause of death.

Results:

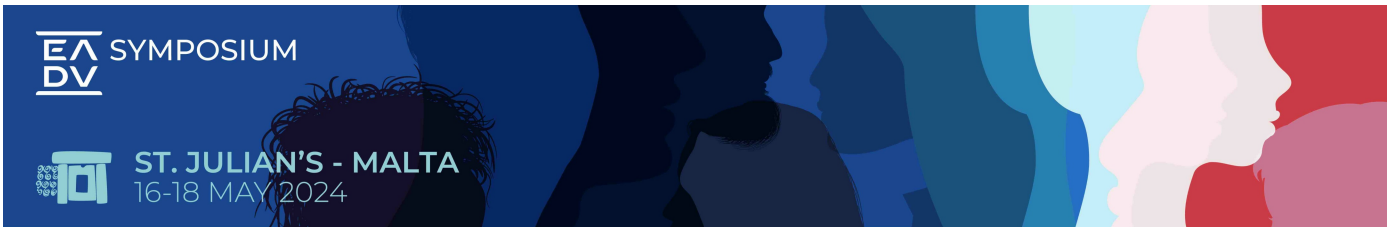
Over 37 years, there were 30 recorded cases of mortality attributed to DEB. All individuals manifested the RDEB-GS subtype. The overall mortality rate among RDEB-GS patients was 37.7%. The average age of death was 16.7 years (2 days - 48 years).

Six patients died before the age of 2, including 3 newborns. Seven deaths occurred before the age of 12, resulting from skin infection-related sepsis (2 cases), bronchopneumopathy (2 cases) or dehydration (3 cases). These early deaths were predominantly observed among older patients who were inadequately monitored.

In adulthood, causes of death encompassed cardiac failure (CF) (2 cases), RDEB-GS-related chronic renal failure (CRF) (4 cases, including instances of AA amyloidosis, mesangial glomerulonephritis, and obstructive renal failure due to bullous tubulopathy), and metastatic squamous cell carcinoma (SCC) (6 cases).

Conclusion:

According to historical data, neonatal mortality in DEB, particularly the RDEB-GS subtype, is attributed to inadequate initial care. During childhood, infections are the primary cause of death. In adulthood, the three main causes of death are SCC, CRF, CF. Metastatic SCC stands as the leading cause of death among RDEB-GS patients. The risk of death from SCC is 10 to 15% at 20 years and increases with age. CRF, resulting from post-streptococcal glomerulonephritis, amyloidosis, obstructive tubulopathy, hydronephrosis, or IgA nephropathy, accounts for 10 to 15% of death cases. Renal amyloidosis stems from chronic inflammation and frequent recurrent infections. DEB is not associated with a high risk of SCC, and the risk of death directly related to the disease itself is absent.



Abstract N°: 1560

Refractory Hailey-Hailey disease: A new case report successfully treated with isotretinoin

Gerardo González-Martínez[1], Luis Yamallel-Ortega[1], Elizabeth Brussolo Marroquin[1], Adrian Cuellar-Barboza[1], Jorge Ocampo-Candiani[1]

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Introduction & Objectives:

Hailey-Hailey disease is a rare autosomal dominant genodermatosis first described in 1939 by the Hailey brothers. This condition manifests as recurrent erythematous plaques and painful erosions in flexural areas triggered by sweating, minor trauma, and infections. To date, few cases have shown clinical improvement with isotretinoin, even in certain cases deterioration under retinoids has been observed.

Materials & Methods:

We report a case of a 60-year-old Hispanic woman presenting with recurrent erythematous plaques located in axillary, inguinal and neck regions treated effectively with isotretinoin.

Results:

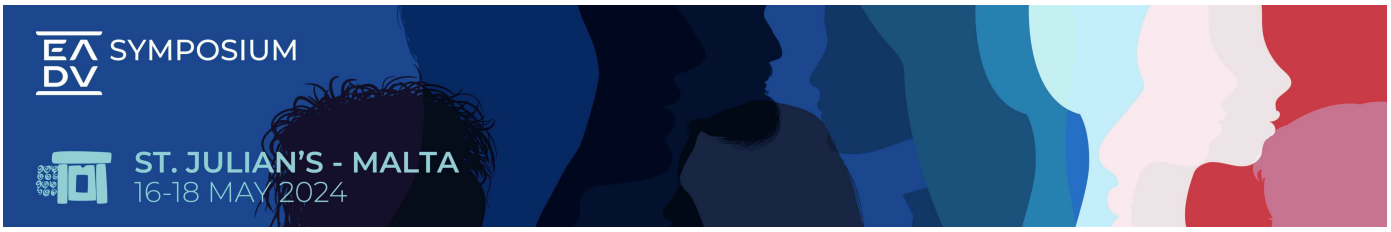
A 60-year-old female with type 2 diabetes who for 25 years had experienced recurrent polymorphic plaques limited to flexural areas presented to our Dermatologic clinic. Dermatologic examination showed diffuse erythematous-violaceous plaques that affected the axillary, inguinal and neck regions, accompanied by pruritus and pain. The patient mentioned similar manifestations affected her mother and two out of her seven siblings.

During these recurrent episodes, various treatments including azathioprine, prednisone, topical corticosteroid, mofetil mycophenolate and methotrexate were prescribed, all of which were unsuccessful.

Given her medical and family history, we suspected a Hailey-Hailey disease and conducted a biopsy. The biopsy revealed parakeratotic crusts overlying in keratinocyte acantholysis of the epidermis consistent with Hailey-Hailey disease. Treatment with isotretinoin 20 mg and tacrolimus ointment 0,03% was prescribed for one month. After a 30-day-follow-up, she exhibited marked clinical improvement. A second cycle of the previous regimen was prescribed leading to complete resolution of the lesions after a 5-month follow-up.

Conclusion:

Hailey-Hailey disease, also known as familial benign chronic pemphigus, is a rare blistering disease linked to mutations in the ATP2C1 gene, resulting in abnormal cytosolic Ca2+/Mn2+ concentrations. Due to the chronic relapsing course of this condition, its management remains challenging. While oral retinoids, such as acitretin and etretinate, have shown effectiveness in many cases of HHD, the use of isotretinoin remains controversial as it has failed to show efficacy in treating this disease. This case report supports the clinical evidence of isotretinoin's potential role in treating refractory Hailey-Hailey disease.



Abstract N°: 1564

Turning point in an inherited blistering disease: evolving phenotype or superimposed dermatosis?

Gabriela Turcu[1, 2], Andra Dinu[1], Andra Miu[1], Dan Mircioi[1], Roxana-Ioana Nedelcu[2], Brinzea Alice[2], Razvan Theodor Andrei[3]

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Introduction & Objectives:

Epidermolysis bullosa is a group of mechano-bullous inherited disorders caused by mutations within 16 genes encoding structural skin proteins. There are four main types of EB (simple, junctional, dystrophic and Kindler syndrome) classified by the level of cleavage (intra-epidermal, in the lamina lucida and sub-lamina densa) and differentiated by transmission electronic microscopy (TEM) or immunomapping. It is not uncommon for clinical features to change over time in terms of type, severity and distribution.

Dystrophic epidermolysis bullosa (DEB) is caused by mutations within the COL7A1 gene encoding collagen VII, resulting in blister formation beneath the lamina densa. The pre-tibial form is a rare variant characterized by the presence of localized blisters, milia, atrophic scars and lesions morphologically similar to lichen planus.

To date, management is mainly supportive and focused on wound care. Of note, the FDA recently approved birch triterpenes topical gel, the first therapy to demonstrate accelerated wound healing in EB. Emerging treatments including gene, cell-based, and recombinant protein therapies are under investigation.

Materials & Methods:

We report the case of a 19-year-old male patient who presented with pruritic pink-to-violaceous and skin-colored papules, some with overlying tense vesicles or hematic crusts and others with milia cysts distributed over the shins. Additionally, he showcased lower extremity ten-nail dystrophy, atrophic skin changes over the knees and elbows along with milia on his knuckles. He also reported the periodic appearance of palatal vesicles with spontaneous healing over a few days.

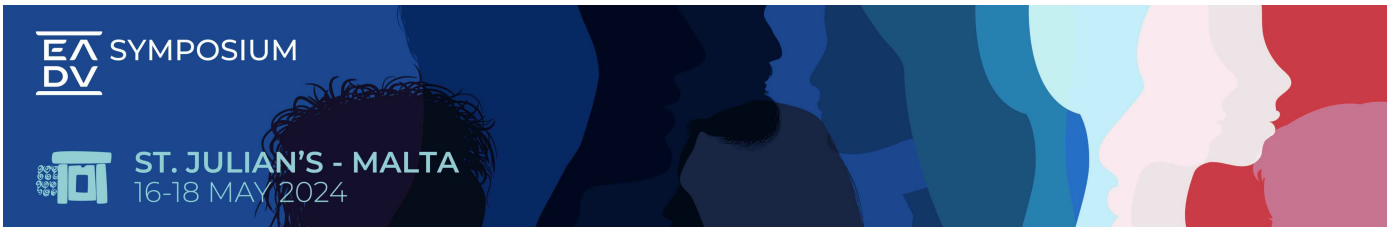
The patient had been diagnosed with epidermolysis bullosa simplex (EBS) since early childhood with favorable course over time. There was no account of familial history of the disease. The present skin, mucosal and adnexal changes had occurred within the last year after a long period of inapparent disease.

Results:

DEB and lichen planus pemphigoides (LPP), an autoimmune blistering disease, were considered as differential diagnoses. Histopathological examination revealed a subepidermal vesiculobullous dermatitis devoid of lichenoid inflammation, with non-specific DIF findings. The clinico-pathological picture was compatible with pre-tibial dystrophic epidermolysis bullosa (DEB). As visualization of the biopsy specimen in TEM was not available, further performing of a 26-gene panel was recommended.

Conclusion:

The particularity of our case lies within the distinct phenotypical presentation of late-onset pre-tibial DEB closely resembling LPP in a patient initially diagnosed with EBS. The case equally highlights the importance of using TEM or immunomapping to characterize the type of EB based on the exact location of the split, as our patient would have likely displayed features of DEB in the absence of a suggestive cutaneous manifestations at the time of onset. Phenotypical expression in EB is highly variable between different subtypes and changing characteristics should prompt reevaluation for correct categorization and appropriate genetic counseling.



Abstract N°: 1759

Vascular Ehlers Danlos syndrome with cryptorchidism: A case report

Aicha Cheab*[1], Hali Fouzia[1], Baghad Bouchra[1], Chiheb Soumya[1]

[1]CHU IBN ROCHD, DERMATOLOGY, CASABLANCA, Morocco

Introduction & Objectives:

Ehlers-Danlos syndrome (EDS) defines a group of rare genetic disorders of connective tissue characterized by the presence of skin hyperextensibility, joint hypermobility and tissue fragility.

EDS is classified into 6 types according to clinical and genetic differences: classic, hypermobility, vascular, cyphoscoliotic, arthrochalasia and dermatosparaxis.

Vascular EDS is characterized by thin, transparent skin, moderate hyperflexibility of small joints and fragility of blood vessels and vital organs. Rupture of the large arteries and intestine is associated with early mortality.

We report a case of vascular EDS with cryptorchidism.

Materials & Methods:

Results:

Case presentation:

An eight-year-old boy consulted in our dermatology department for anetodermal lesions and scarring of the lower limbs with cutaneous hyperelasticity and ligamentous hyperlaxity, with a medical history of right cryptorchidism.

Clinical examination revealed ecchymosis and haematomas with hyperpigmentation at the slightest trauma. The skin of the extremities was atrophic, easily extensible, with papyraceous scars and dehiscence of wounds after suturing.

Chest X-ray showed a cloven-hoofed heart, dorsolumbar X-ray revealed scoliosis, ECG showed repolarization disorders with also ventricular and supraventricular extrasystoles on ECG-Holter, ophthalmological examination for lens subluxation was normal, and skin biopsy showed abundant sparse collagen fibers.**

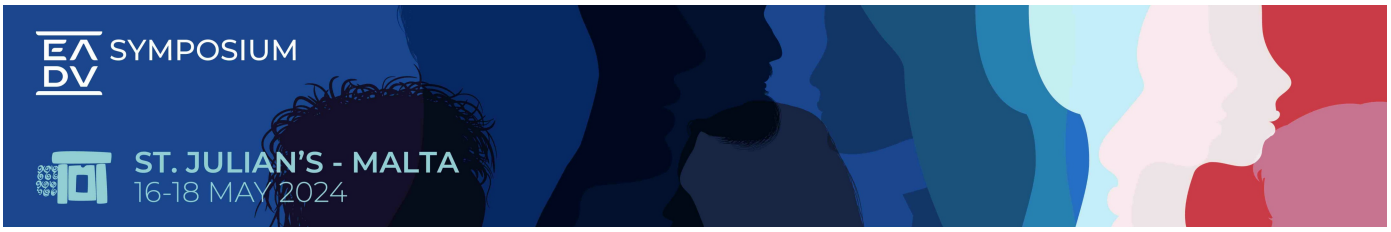
Conclusion:

Our patient illustrates a rare presentation of vascular EDS with the notion of cryptorchidism associated with a highly mobile testis. The vascular form differs from the classic, hypermobile forms in its increased risk of spontaneous vascular rupture (iliac artery, splenic artery, renal arteries) or visceral rupture (intestine, gravid uterus).

Skin is thin, translucent and fragile, and underlying vessels are visible. Atrophic scarring is increased. Spontaneous bruising is common. Wound dehiscence may occur after surgical interventions. Patients also present with short stature and skeletal abnormalities such as clubfoot and hip dislocation.

Knowledge of the basic implications of EDS can minimize patient morbidity and mortality without the need for in-depth knowledge of the disease.

Thus ,it’s important for the family to be informed about the future risk of vascular or surgical complications due to fragile tissues, and the necessity of close follow-up for the potentially fatal complications



Abstract N°: 1768

Navigating through scales: A portrait of Lamellar Ichthyosis and its unique dermatological challenges

Daciana Elena Branisteanu[1], Mihaela Paula Toader[1], Antonia Clivet*[1], Stefana Maria Capsa[1], Roxana-Paraschiva Ciobanu[1], Alexandra Starica[1], Andreea-Caterina Rusu[1]

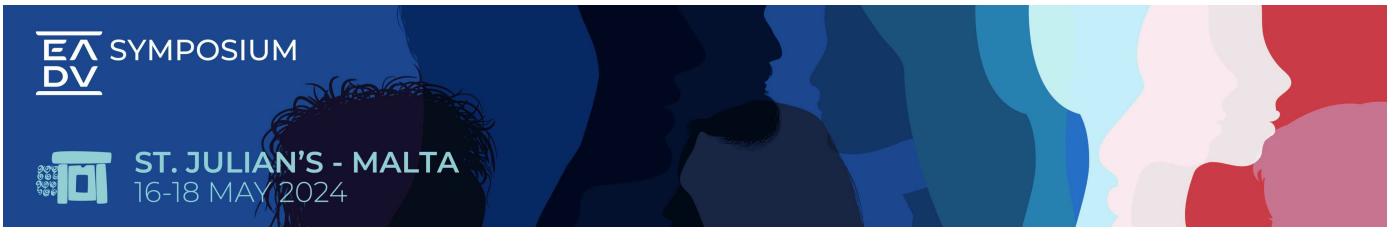
[1]Railway Clinical Hospital Iasi

Introduction & Objectives: In the field of dermatology, clinicians face unique challenges when dealing with lamellar ichthyosis, a rare inherited disease of cornification involving hyperkeratotic scaling at birth. Following the disruption of the barrier properties of the skin, an increased fluid and calorie loss, difficulty in temperature regulation and a susceptibility to infection are noted.

Materials & Methods: In this report we present the case of a caucasian male who was diagnosed with autosomal-recessive lamellar ichthyosis, presenting large, brown, scales forming a mosaic pattern, consistent for this diagnosis.

Results: A 6 year old was referred to our dermatology clinic due to persistent large, dark brown scales covering the entire body including flexural folds, palms and soles, along with multiple linear fissures. A comprehensive anamnesis revealed that the patient was born via spontaneous vaginal delivery at 34 weeks after an uncomplicated pregnancy to a 25-year-old woman, with generalized erythema and scaling developed 3 days after the delivery. Over the years, the patient tried various treatment approaches, including keratolytics, homemade solutions, and unconventional strategies involving hyperimmune eggs (used both topical and systemic). Unfortunately, none of these approaches yielded favorable results. In early 2022, a punch biopsy was performed and the histopathological findings were consistent with a form of lamellar ichthyosis. During the patient's presentation at our clinic, a thorough physical examination was performed, including an ocular examination for visual acuity, lid function, eyelid malposition, which revealed the development of cicatricial ectropion, cicatricial lagophthalmos, moderate amblyopia. Other relevant findings were eclabium and onychodystrophy. Frequent applications of emollients, oily baths and topical keratolytic agents with varying concentrations of urea were used, along with the appropriate management of ophthalmic involvement. Periodic visits were performed in order to assure no complications arise and the therapy is well tolerated.

Conclusion: This case review aims to provide a comprehensive analysis of a patient with lamellar ichthyosis, discussing the clinical presentation and treatment options to improve the skin's barrier function. Since there is no cure for lamellar ichthyosis, a combination of emollients, keratolytic agents and an interdisciplinary approach consisting of periodic dermatological, ophthalmological, pediatric and psychological consultations is necessary for disease management. Significant progress has been made in recent years in understanding the underlying mechanisms of ichthyosis. This newfound knowledge, coupled with continuous advancements in treatment strategies rooted in understanding the disease's causes, such as protein replacement therapy and gene therapy, holds great promise for those affected by inherited skin conditions. Numerous ongoing trials are underway to assess the effectiveness of these innovating approaches. Moreover, various case series suggest that biological therapies, some of which are already used for other diseases with impressive results and considered to have a good safety profile, represent viable treatment options. Considering all these factors, there is anticipation that these emerging therapies will demonstrate their effectiveness and become integral components of ichthyosis treatment protocols.



Abstract N°: 1879

Familial Richner-Hanhart syndrome: Report of a sibling with incomplete presentation

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Introduction & Objectives:

Richner-Hanhart syndrome (RHS, tyrosinemia type II) is a rare autosomal recessive inborn error of tyrosine metabolism that presents with painful palmoplantar hyperkeratosis, mental impairment, and photophobia. These manifestations often start in the first days of life.

Herein, we describe a sibling with RHS, which clinical presentation appeared at different age of onset.

Materials & Methods:

Our patient was a 26-year-old female complaining of burning and redness of the eyes from childhood. Multiple Focal painful hyperkeratotic lesions appearing on plantar areas without involvement of palms from 5 years ago, had exacerbated in recent months. She had received different topical medication without any improvement. In the family history, her 34-year-old brother had visual impairment from early childhood. Mild palmar hyperkeratotic lesions appeared when he was 2 years old. His symptoms healed after few years without any treatment, but he suffered from severe cognitive disorder. Other family members had no similar history. Physical examination revealed yellowish painful hyperkeratotic plaques on the soles (Figure 1A). Ophthalmological examination and other examinations were normal. Diagnosis of RHS was suspected according to clinical findings and her family history. An increased plasma level of tyrosine 156 µmol/L was detected in our patient, in her brother survey tyrosine plasma level was 843 µ mol/L (reference range: 22-101µmol/L). Measurement of urine organic acid showed elevated level of tyrosine (165mmol/mol and 80mmol/mol respectively, reference range: 4-21mmol/mol). The diagnosis of RHS was confirmed. Tyrosine and phenylalanine restricted diet was considered for her. Her oculocutaneous symptoms signifiantly improved two weeks after proposed dietary schedules and the plasma level of tyrosine decreased (793 µmol/L)(Figure 1B).

Results:

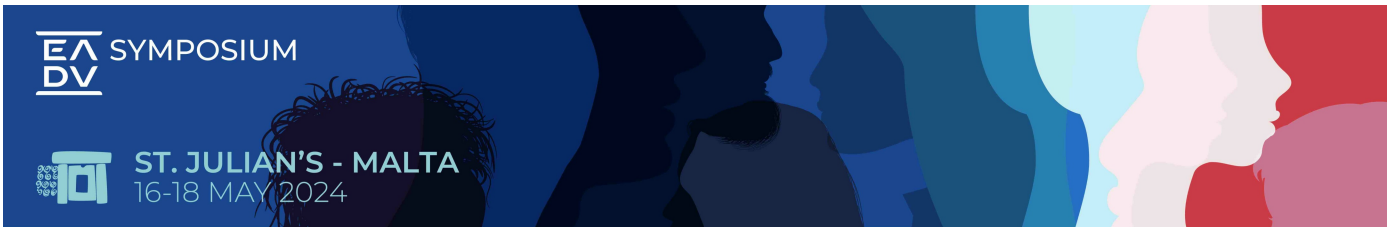
Tyrosine is a non-essential amino acid that originates from diet or products of phenylalanine in the body. Tyrosinemia type II is a rare genetic disorder incidence of less than 1/250,000 and caused by a mutation in tyrosine aminotransferase (TAT) gene.

Cutaneous manifestations can appear in the first week of life or maybe delayed until the second decade. Lesions present as painful hyperkeratotic patches or plaques on the palms and soles. Ocular manifestations occur in the first days of life or as late as fourth decade. These manifestations are characterized by photophobia, redness, and bilateral pseudoherpetic corneal ulcerations. Skin lesion may precede ocular symptoms, develop at the same time or occur later. Mental impairment can manifest with varying degrees, or may not always occur.

Diagnosis of RHS is confirmed by elevated plasma and urine levels of tyrosine, and analysis of TAT gene. In therapeutic management, low tyrosine and phenylalanine intake, administration of vitamins, minerals and essential amino acids and systematic retinoid especially for skin involvement are recommended. Despite the role of corticosteroids in TAT induction, systemic corticosteroids were not useful for therapy.

Conclusion:

With regard to possibility of late-onset presentation of RHS symptoms in some of the patients, RHS should be considered in adults with painful hyperkeratotic palmoplantar.



Abstract N°: 1936

Junctional epidermolysis bullosa generalized severe

Mirjana Gajic-Veljic[1], Jovan Lalosevic[1], Katarina Djordjevic[2], Maja Vilotijevic[2], Miloš Nikolić[1]

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Introduction & Objectives:

Junctional epidermolysis bullosa (JEB) generalized severe (previously called JEB Herlitz) is a lethal, autosomal recessive blistering disease affecting the skin and mucous membranes caused by null mutations in the genes coding for the lamina lucida⁄densa adhesion protein laminin-332 (LAMB3, LAMA3 and LAMC2).

Materials & Methods:

We present a 1.5-month-old Caucasian boy with the appearance of bullae and extensive erosions shortly after birth. Family history was negative, consanguinity was denied.

Results:

The baby was transferred to our department with generalized erosions, especially extensive gluteally, on the neck and extremities. Incipient granulations were present on the buttocks. He had no syndactyly, nor skin atrophy. Numerous confluent erosions were present in the oral cavity. The child's cry was muffled and hoarse, but it was not possible to examine the larynx or perform a tracheoscopy due to the extreme fragility of the mucous membranes.

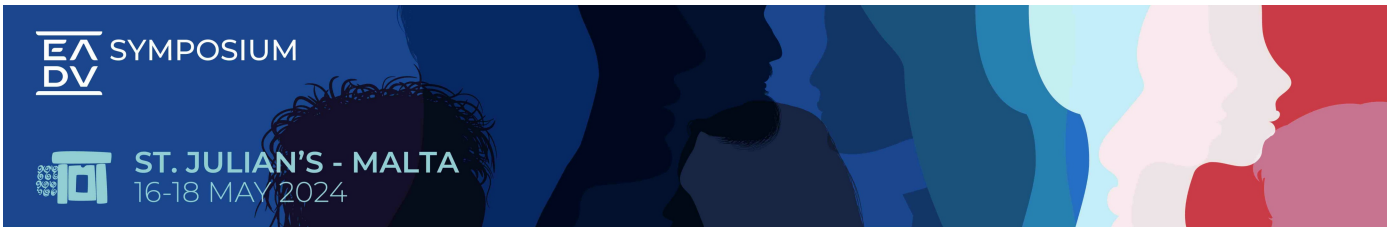
Due to the pronounced erythema direct immunofluorescent (IF) test was performed and showed numerous spontaneous subepidermal splits, but without deposits of immunoreactants. Indirect IF was negative. Histopathological findings also showed a subepidermal cleft, with a predominance of eosinophils. ELISA panel on AIBD showed reactivity to numerous basement membrane zone antigens: anti BP180 ++, anti BP230 ++++, anti Dsg1 +++, anti Dsg3+++, anti Envoplakin +++, anti Collagen type VII ++. Genetic analysis showed a homozygous genetic variant c.31dup (p.Leu11ProfsTer43) in the LAMB3 gene.

The patient was treated with systemic antibiotics based on an erosion smear (Pseudomonas aeruginosa, Klebsiella, Enterobacter, Enterococcus spp) and antibiogram, analgesics and topical antiseptics, antibiotics and Mepilex transfer. After 2 months of treatment, with 3.5 months of life, the child died in the intensive care unit due to pneumonia, respiratory distress and sepsis (CRP 290.8 mg/L, procalcitonin 10.83 ng/ml, in blood culture *MRSA*).

Conclusion:

The diagnosis of JEB generalized severe was established based on the clinical picture and course of the disease (sepsis, respiratory tract involvement, suspected subglottic accumulation of granulation tissue surrounding the airway with a weak, hoarse cry and fatal outcome) and genetic analysis. In 80% JEB generalized severe is caused by null mutations in LAMB3 gene. JEB generalized severe is the result of inactivating pathogenic variants on both alleles, which result in little or no functional protein.

JEB generalized severe incidence is very low (0.41 per million), but is probably underestimated: many individuals with JEB generalized severe go unreported because infants succumb to the disease in the neonatal period (a mortality rate of 73% in infancy has been reported). In our country, in the last 30 years, in addition to this proven JEB generalized severe, there was only one other suspected case, but the baby died before the genetic diagnosis was carried out.



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Anhidrotic ectodermal dysplasia: a rare syndrome.

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Introduction & Objectives:

Anhidrotic ectodermal dysplasia or Christ-Siemens-Touraine syndrome is a rare, hereditary genodermatosis, most often recessive linked to the X chromosome.

It is the most common of ectodermal dysplasias, but this condition is still rare.

Case report:

We report the case of a 28-year-old patient who consulted for anhidrosis.

On examination, we find a dysmorphic appearance, thick lips, a feeling of enophthalmos due to hypertrophy of the orbital frame. The triad of anhidrotic ectodermal dysplasia is found, namely hypodontia, hypotrichosis, and anhidrosis.

The patient's dentition is characterized by the persistence of only 5 incisors, conical in shape, and caries.

Hair growth is poor overall, with almost non-existent eyebrows, madarosis (absence of eyelashes), hair in the axilla, and no pubic hair. The skin is hairless on the trunk, upper and lower limbs. The hairs of the beard and mustache are spared. As for the scalp, the hair is present but fine, sparse, with dermoscopy one hair per orifice, no anisotrichia, a few bent and broken hairs.

The skin is dry, and there is eyelid hyperpigmentation responsible for very marked dark circles, extending around the nose and mouth. Small white papules are observed on the face, on the chin, the sides of the nose, and between the eyebrows, related to hyperplasia of the sebaceous glands. There is no nail damage.

Psychological development and weight status are normal, and there are no similar cases in the family.

Discussion:

Anhidrotic ectodermal dysplasia is a condition characterized by numerous abnormalities of the epidermis and its appendages.

The triad of anhidrosis, hypotrichosis, and hypodontia represents the main clinical signs.

Hair growth is poor overall (armpits, pubis), while only the beard and mustaches are respected. The hair is rare, baldness is early. Eyelashes and eyebrows have the same abnormalities.

The absence or scarcity of tooth buds affects both teeth. The shape of the teeth is also affected, the teeth are conical.

The absence or hypoplasia of the seromucous glands of the respiratory system is quite common. This promotes the development of respiratory infections: recurrent bronchial pneumonia, nasopharyngeal infections and asthma.

While there is no doubt about the hereditary nature of DEA, it appears that several transmission mechanisms are possible. The recessive mode linked to the X chromosome is by far the most common. Only men are affected and show the complete form of the syndrome, while women, carriers, express little or no clinical signs of anhidrotic ectodermal dysplasia.

Skin biopsy is the key diagnostic test. It is practiced in an area rich in sweat glands. There is a reduction or disappearance of the sweat glands and pilosebaceous follicles.

Furthermore, the minimum assessment must include an ophthalmological, ENT and pneumological examination.

The treatment aims to restore dental capital to improve aesthetics and functionality, through dental prostheses.

Conclusion:

Anhidrotic ectodermal dysplasia remains a syndrome that is still poorly understood. It is responsible for significant aesthetic and functional damage. It is essential for the dermatologist to know how to recognize this syndrome, made up of the triad of hypodontia, hypotrichosis and anhidrosis, to make an early diagnosis in order to improve the patient's quality of life by optimizing the treatment, which must bemultidisciplinary involving the dermatologist and the maxillofacial surgeon.