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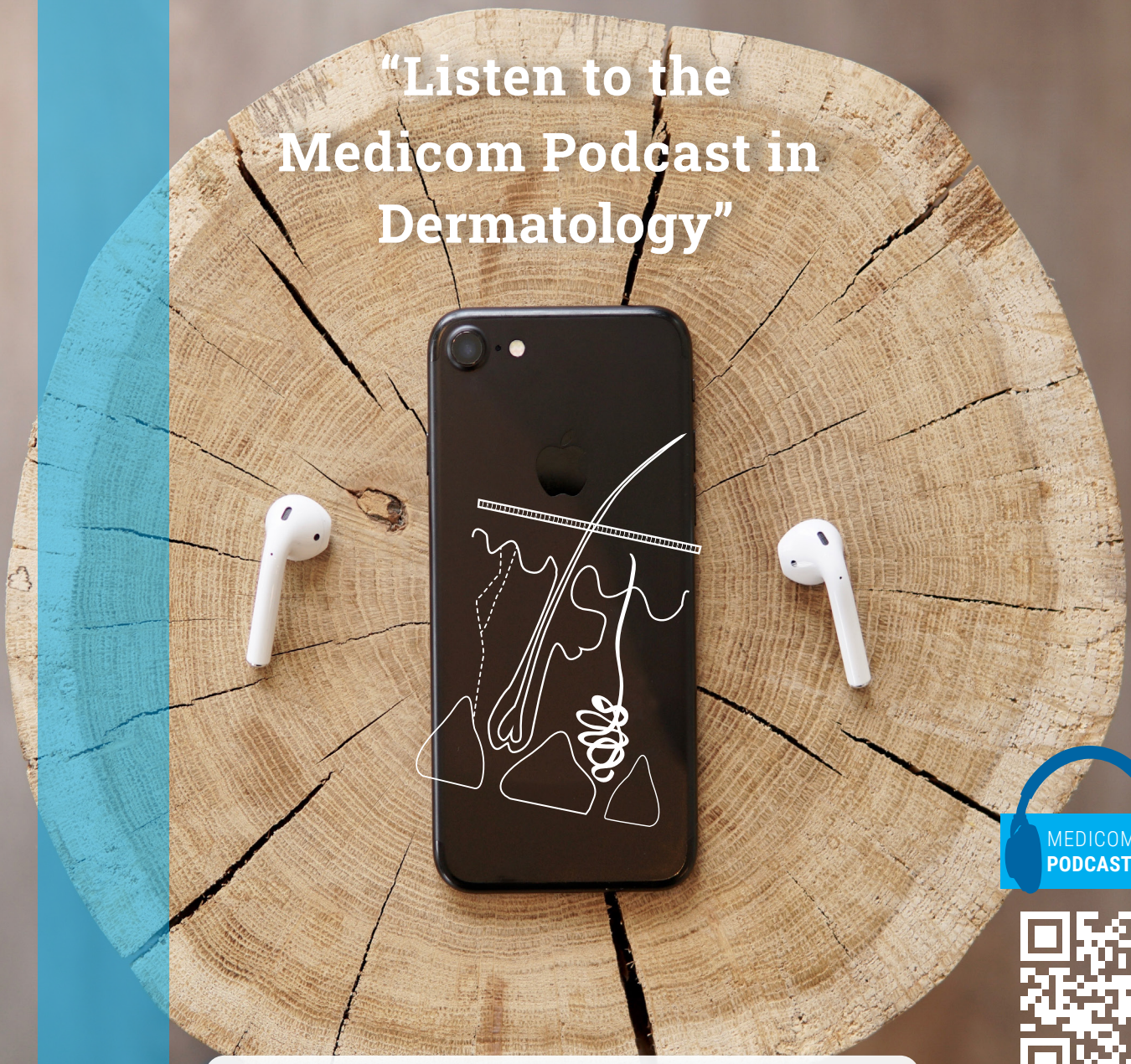

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1. Common triggers of allergic contact dermatitis in Sri Lanka

Common allergens that trigger allergic contact dermatitis (ACD) can be country-specific. Patients in Sri Lanka underwent patch testing and were found to be most allergic to potassium dichromate, paraphenylenediamine (PPD), and nickel sulphate.

ACD is a type IV-mediated hypersensitivity reaction to a specific allergen, resulting in an inflammatory response after exposure. It affects millions of people all over the world and is the most common reason for dermatology visits globally. Symptoms include pruritus, erythema, vesicles, and scaling of the skin. A variety of allergens can cause contact dermatitis, such as cosmetics, fragrances, occupational hapten, metals, jewellery, antiseptics, and plants. However, the most commonly identified allergen may differ per country. Patch testin is the gold standard in the diagnosis of ACD.

Dr Thanushah Balendran (Teaching Hospital Batticaloa, Sri Lanka) and her team conducted a retrospective analysis on patch testing data [1]. A total of 108 patients were included from the dermatology unit of the Teaching Hospital Batticaloa, Sri Lanka, between 2013 and 2020. Two patch test products were compared: the European Baseline Series and Shoe Series (Chemotechnique Diagnostics).

Of 108 patients, 47 (43%) were women. More than half (n=61) of the patients had a positive patch test. More positive patch tests were found with the European Baseline Series compared with the Shoe Series (63% vs 41%). Feet were found to be the most frequently affected site, followed by hands and face. Potassium dichromate was the most commonly detected allergen (15%), followed by PPD (11%), nickel sulfate (10%), textile dye (8%), and fragrance (7%).

The presented results were in line with previous data from Sri Lanka but were contradictory to findings from other countries. The authors suggested that occupation may have influenced the current data. Thus, highlighting the need to consider occupation and environmental factors when treating patients with ACD.

1. Balendarn T, et al. Common Allergens In Patients With Allergic Contact Dermatitis – A Retrospective Study Done At Dermatology Clinic, Teaching Hospital, Batticaloa, Sri Lanka. Abstract 195, ICD 2021, 10–13 November 2021.

2. An unusual case of *E. coli* cellulitis in an immunocompetent patient

Cellulitis due to *Escherichia coli* is uncommon and thought to be limited to immunodeficient patients. An unusual case of serious *E. coli* cellulitis was reported in an immunocompetent 84-year-old woman.

Cellulitis is an infection of the dermis and subcutaneous tissue. While the causative organism is not always identified, cellulitis caused by *E. coli* is rare and has exclusively been reported in immunodeficient patients. However, Ms Jacqueline Nguyen (St Vincent's Hospital Melbourne Docklands, Australia) shared an unusual case of E. coli cellulitis with associated bacteraemia in an immunocompetent patient [1].

An 84-year-old woman presented with a 10-day history of a painful, progressive rash on the right lower limb. It was tender with no blistering, necrosis, or crepitus. Her past medical history included atrial flutter, hypertension, hypercholesterolaemia, and breast cancer. She presented septic, hypotensive, tachycardic, and afebrile. On investigation, CRP was elevated and blood culture was positive for *E. coli*. Skin biopsies demonstrated patchy perivascular and focally interstitial inflammatory infiltrates in the dermis consistent with cellulitis. Cultures of skin and fascia both yielded light growth of sensitive *E. coli*. She received ongoing intravenous antibiotics and vasopressor support during her prolonged 32-day admission, which was further complicated by poor wound healing of the cellulitis. She was discharged with a 6-week course of amoxicillin-clavulanate. At 1 month follow-up, the cellulitis was resolved and the wound was healed.

A review of existing literature showed 11 reported cases of *E. coli* cellulitis, of which all have occurred in patients with underlying disease. The presented case is the first to be reported in an immunocompetent patient. One of the proposed mechanisms of infection is that congestive heart failure can increase intestinal permeability or promote bacterial overgrowth allowing translocation of gastrointestinal enteric flora such as *E. coli* to cause sepsis and cellulitis.

While uncommon, it is important to consider *E. coli* as a potential causative agent in both immunocompromised and immunocompetent patients. Early investigation with blood cultures, CT imaging, and skin biopsy may guide diagnosis.

1. Nguyen N, et al. A Rare Case Of Escherichia Coli (E.coli) Cellulitis With Associated Bacteraemia In An Immunocompetent Patient. Abstract 88, ICD 2021, 10–13 November 2021.

3. Autologous serum therapy benefits chronic spontaneous urticaria

Autologous serum therapy (AST) is a promising therapy for the treatment of urticaria that does not respond to antihistaminic treatment. The current study showed that it is effective and safe in children. Moreover, it reduces the pill burden and improves the quality of life.

Chronic urticaria is an allergic condition of the skin causing itchy wheals, and is mostly spontaneous in onset. Treatment includes long-term antihistaminic therapy, but insufficient response or non-response can occur. For that reason, Dr Akash Agarwal (IMS and SUM Hospital Bhubaneswar, India) conducted a prospective, open-label, pilot study to determine the efficacy and safety of AST in paediatric patients with chronic spontaneous urticaria (CSU) [1].

Children aged between 6 and 16 years old were included when diagnosed with CSU and when itching and wheals occurred daily or nearly daily for more than 3 times per week for more than 6 weeks. Clinical and demographical characteristics were extracted from medical records. Autologous serum skin test (ASST) was performed at baseline to control for autoreactive urticaria (AU). AST was given, every 2 weeks for a total of 8 visits, together with levocetrizine (5mg) on an on-demand basis. The primary efficacy outcome was urticaria activity score (UAS) and a secondary efficacy outcome was pill burden.

In total, 22 patients were included: 14 patients in the ASST positive group, and 8 patients in the ASST negative group. The mean age of the patients included was 12.2 ± 2.3 years with a mean chronic urticaria duration of 6.7 ± 2.0 months. Significant improvement of UAS was seen in the period of time between the 5th visit and the 8th visit (median UAS 9.5 vs 2; P<0.0001). ASST-positive patients showed fewer months of chronic urticaria than ASST-negative patients (6.2 ± 2.1 vs 7.8 ± 1.4; P=0.085). Pill burden was significantly decreased (p-value not mentioned). No adverse events were reported and laboratory parameters at baseline and final visit were comparable.

This first pilot study exploring efficacy and safety of AST concluded that 2-weekly AST could be a feasible option for children with CSU who do not respond to antihistaminic therapy. AST seemed to be safe and associated with decreased pill burden. Limitations of the study were a lack of control group and lack of follow-up.

1. Agarwal A, et al. Efficacy and safety of autologous serum therapy in chronic spontaneous urticaria in the paediatric population: a prospective, open label, pilot study. Abstract 177, ICD 2021, 10–13 November 2021.

4. Age at disease onset: a key factor in understanding psoriasis

Evidence suggests that early-onset psoriasis (EOP) and late-onset psoriasis (LOP) are different diseases. The current study investigated the difference between EOP and LOP in an Indian population and found clinical differences between both groups.

HLA-Cw6 is an allele associated with psoriasis susceptibility and increased severity. Normally, this form of psoriasis is present at a younger age because of its genetic origin. Depending on the age of onset, different clinical patterns have been identified for psoriasis: EOP, presenting <40 years of age and LOP, presenting ≥40 years of age. A difference in treatment response has been observed for EOP versus LOP in European and East Asian populations, but there is a lack of data from Indian patients. Dr Farhat Fatima (M. R. Bangur Hospital, India) shared the results of a descriptive, cross-sectional study that compared clinical patterns of *HLA-C2w6* association of EOP versus LOP in Indian patients [1].

Medical history and clinical variables were collected, as well as blood samples that were taken from a subset of patients to test for the presence of *HLA-Cw6* [1]. Of the total study population (n=250), 138 patients were allocated to the EOP group and 112 in the LOP group. Sex ratio differed significantly (P=0.01) between groups; more men were included in both groups. Family history of psoriasis was higher in EOP than LOP (12.3% vs 3.6%; P=0.01).

In both groups, the most common site involved were the lower limbs (70% EOP; 75% LOP; P=0.28). A significantly higher percentage of nail involvement was found for EOP compared with LOP (55.8% vs 34%; P-value not shown). *HLA-Cw6* analysis was done in 15 EOP and 15 LOP patients. A significantly higher percentage of patients with EOP were positive for *HLA-Cw6* than LOP patients (73.3% vs 20%; P-value not shown). For a better understanding of the role of *HLA-Cw6* in psoriasis, a higher number of patients and healthy controls should be analysed.

The current study supports the concept of 2 subtypes of psoriasis based on the age of onset: EOP and LOP. Further recruitment of patients and adding more clinical parameters, such as comorbidities and treatment response, are required for future investigation on the difference between the 2 subtypes.

1. Fatima F. Early vs late onset psoriasis: comparative study of clinical variables and association with HLACW6. Abstract 234, ICD 2021, 10–13 November 2021.

5. Comparing routes of administration of methotrexate in psoriasis patients

Methotrexate is the most commonly used systematic drug, in both oral and subcutaneous form, in the treatment of psoriasis. A prospective, randomised, single-blinded study found that the efficacy and safety of methotrexate were not associated with the route of administration.

The FDA-approved drug methotrexate is used to treat moderate-to-severe psoriasis. It is believed to exert both antiproliferative and immunomodulatory effects and can be given either orally or subcutaneously. However, the route of administration of methotrexate has not been intensively studied for efficacy and side effects [1].

Therefore, Mr Ishan Agrawal (Siksha O Anusandhan University Bhubaneswar, India) and his team aimed to compare the effectiveness and side effects of oral versus subcutaneous methotrexate in chronic plaque psoriasis. In a prospective, comparative, single-blinded study (CTRI/2020/07/026598), adult patients (n=100) were randomised to receive oral methotrexate or subcutaneous methotrexate weekly for 24 weeks. The starting dose was 7.5–10 mg/week and could be increased with 2.5mg/week mg monthly depending on clinical response. Psoriasis was assessed by different methods, including Psoriasis Area Severity Index (PASI), Physician Global Assessment (PGA) score, Medical Adherence Score (MAS), and Dermatology Life Quality Index (DLQI) with dermoscopic and photographic evaluation at monthly intervals.

The oral methotrexate and subcutaneous methotrexate group showed similar age distribution and 26% versus 30% women, respectively. At 24 weeks, the mean difference in PASI and PGA from baseline was not significant. MAS increased from baseline to week 24 in both groups (P<0.001), while DLQI decreased in both groups (P=0.039) with a larger difference for the subcutaneous group.

At 6 months of therapy, oral and subcutaneous methotrexate had similar efficacy. However, a faster decline in PGA at week 8 was seen for subcutaneous methotrexate. Both routes of administration did not show any side effects that have not previously been reported with methotrexate. Improved MAS and DLQI were seen for the subcutaneous route.

1. Agrawal I, et al. A Prospective Randomised Comparative Study On The Efficacy And Safety Profile Of Oral Versus Subcutaneous Methotrexate In Patients Of Moderate To Severe Chronic Plaque Psoriasis. Abstract 208. ICD 2021, 10-13 November 2021.

6. Expanding the toolbox: what is new in melanoma detection?

Malignant melanoma is one of the most common cancers diagnosed. Early detection is important for disease progression. An update was given on novel, promising screening methods, although the target population should be carefully selected.

Prof. James Grichnik (University of South Florida, FL, USA) presented an overview of current methods and new developments in the malignant melanoma landscape [1]. The rationale for screening is that early detection and removal of lesions should prevent progression, morbidity, and mortality. However, screening people without skin lesions would identify people who would never have symptoms, leading to overdiagnosis. A recently published review showed that screening of the general population for malignant melanoma is not supported by current evidence [2]. The overall number needed to treat (NNT) for malignant melanoma is 9.7; corresponding to an NNT of 22.6 for primary care, 9.6 for dermatology, and 5.9 for pigmented lesion specialists.

Tools that are used to improve the accuracy of detection include the use of total body photography. It can improve early detection for high-risk populations. However, the target population that should be imaged and followed needs to be better investigated. Dermoscopy is another tool to help diagnose malignant melanoma. Moreover, smartphone applications for detecting malignant melanoma by non-specialist users looks promising, especially for educational purposes, but they still have a long way to go. An area that is ready for implementation is confocal microscopy, a non-invasive technique that allows examination of the skin with cellular resolution. Electrical impedance has also been shown to improve the sensitivity of diagnosing lesions. Finally, molecular testing may be useful by decreasing the rate of false-positive diagnoses when standard methods show inconclusive results.

Overall, the new technologies for earlier detection of malignant melanoma look promising and rapidly evolving.

1. Grichnik J. Update on melanoma detection. Update talks, ICD 2021, 10–13 November.
2. Johansson M, et al. Cochrane Database Syst Rev. 2019 Jun 3;6(6):CD012352.

7. Equity in dermatology: Skin Care For All

Advocating and promoting the concept of "Skin Care For All" is central to efforts addressing skin health disparities and achieving skin equity. To achieve and sustain skin equity, a practical action framework is proposed that relies on 4 pillars: cross-sectoral collaboration, evidence-based policies with implementation in mind, community, and individual implications.

Skin diseases are a leading cause of health burden, affecting 30 to 70% of individuals across cultures and ages [1]. Community skin health has not been prioritised while it contributes to the global disease burden. Skin health disparities are often caused by Social Determinants of Health, consisting of economic and political structures, social and physical environments, and access to health services.

Dr Jeslyn Tengkawan (Johns Hopkins University, USA; Capella Project Foundation, Indonesia) argued that Skin Care For All should be achieved through need assessments and research into emerging public health diseases, and plans on how to implement these findings in public health through cross-sectoral collaboration. Dr Tengkawan presented an action framework aimed at improving skin health through a community-health improvement process model. The model starts with problem identification and prioritisation of the burden of skin-health problems in the community, which should be conducted by the government, stakeholders, and institutions. Community education and awareness also play a big role in the proposed model.

The action framework Dr Tengkawan and her team propose can especially support those in developing countries, to start promoting and advocating the importance of the Skin Care For All concept.

1. Tengkawan J, et al. An Action Plan Framework For Global Health Dermatology To Reduce Skin Health Disparities And Achieve Skin Care For All. Abstract 145, ICD 2021, 10–13 November 2021.

8. Challenges in diagnosis and treatment of leprosy in Brazil

Leprosy is considered a neglected tropical disease that remains a major public health problem. Brazil is a country with a high leprosy new case detection rate. Key obstacles in Brazil include poor access to diagnosis and late treatment.

Prof. Caroline Talhari (Amazonas State University, Brazil) explained that India, Brazil, and Indonesia account for 80% of leprosy cases worldwide [1]. The incidence of leprosy has decreased by 37% since 2017. This might look like a victory in eradicating leprosy, but the decrease was associated with decreased diagnosis due to the COVID-19 pandemic. From 2010 to 2019, the incidence of leprosy remained stable in Brazil, indicating that many people still get diagnosed with leprosy every year. Although leprosy is a curable disease, it lacks good diagnostic tools, preventive and therapeutic strategies. Misdiagnosis, delay in diagnosis, and mistreatment often occur leading to ongoing transmission.

Leprosy is common in adults, but leprosy in children is more frequent than generally thought. Household contact is the most likely source of leprosy transmission. An increase in the number of children with leprosy in the past 40 years is alarming and makes Brazil a highly endemic country.

Another challenge in combatting leprosy is the need for new diagnostic tools as the disease is easy to confuse with other skin diseases. Serological tests may differentiate leprosy but its sensitivity is low. In addition, patients with leprosy co-infected with HIV may present a more severe form of the disease. To classify patients suffering from both leprosy and HIV, the authors proposed to separate leprosy and HIV co-infection from opportunistic leprosy disease and highly active antiretroviral therapy-related leprosy.

The currently recommended treatment regimen is a combination of dapsone, rifampicin, and clofazimine. Individuals with paucibacillary leprosy are treated for 6 months and those with multibacillary leprosy for 12 months.

1. Talhari C, et al. Tropical Diseases. Session Global Unmet Needs in Dermatology, ICD 2021, 10-13 November 2021.

9. A PASSION to provide dermatological care in LMICs

Dermatology offers many opportunities for the implementation of artificial intelligence (AI) due to its large clinical and image database. The PASSION project was designed to help diagnose skin conditions in countries with a lack of dermatology care.

Chronic skin conditions affect millions of individuals around the world. Unfortunately, dermatologists are underrepresented in low-income and middle-income countries (LMICs), which makes access to specialist care challenging. Dr Christophe Hsu (University Hospital of Basel, Switzerland) shared the objective of the PASSION project, which is to design and implement algorithms that can help diagnose skin conditions, including atopic dermatitis, impetigo, tinea, scabies,

and insect bites, in the paediatric population [1]. These 5 treatable disorders account for almost 80% of skin conditions in children. The PASSION project is a non-profit initiative that combines clinical trials with AI in Madagascar and Guinea. The study will soon be extended to other countries such as Mali, Mauritania, Mexico, and Indonesia.

Clinical data of patients together with high-quality images of the skin conditions are uploaded onto a digital platform. Through machine learning, a Convoluted Neural Network algorithm is trained to recognise specific skin conditions. The algorithm will improve automatically through experience. In a testing group, diagnosis is made by both AI and a dermatologist and compared with each other.

While no results of the PASSION project itself are available yet, early results from a European dataset showed that atopic dermatitis can be diagnosed through AI with a precision of 93% and a recall of 91%, based on 20,000 images for training and 4,000 for testing.

Overall, AI could contribute to the diagnosis of paediatric patients with chronic skin conditions in areas where access to dermatology care is limited.

1. Hsu C, et al. Identification of common skin disorders on dark skin using artificial intelligence. Abstract 69, ICD 2021, 10–13 November.

10. Paediatric dermatology in Tunisia: common diagnoses

Up to 30% of paediatric primary care visits include a skin-related problem. In an overview session, Dr Nejib Doss (Military Hospital of Tunis, Tunisia) took the audience through the most commonly diagnosed skin disorders in Tunisian children [1].

Molluscum contagiosum: a common, mild, viral skin disease that causes small pink or skin-coloured bumps. Most of the time it is self-limiting, but a doctor can prescribe a cream or remove the bumps by scraping or freezing.

Cutaneous leishmaniasis: a parasitic disease that causes chronic, often ulcerated, skin lesions. It is a major public health problem in Tunisia, and diagnosis is relatively easy for dermatologists who are familiar with the disease. Although spontaneous healing might occur, treatment options include azithromycin, metronidazole, and liquid nitrogen.

Inherited epidermolysis bullosa: a number of inherited skin disorder that causes blisters even after the mildest trauma. They are genetic diseases with a high medical and social burden. Many patients with mild forms require little or no treatment. However, patients with severe forms require daily intense care focused on blister treatment, preventing infection, and promoting wound healing.

Systemic lupus erythematosus: an autoimmune disease characterised by inflammation and damage to the skin and eventually organs. Rapid diagnosis and treatment are necessary to prevent major organ damage. Survival has improved dramatically due to the introduction of steroids and immunosuppressives.

Annular pustular psoriasis: a rare, severe form of psoriasis characterised by widespread lesions. It can present with acute or subacute symptoms. In some patients, topical therapy may help, although severe cases should be treated with systematic therapy.

Onychomadesis: a spontaneous, complete detachment of the nail plate from its proximal end. It can affect both hands and feet and can be a complication after hand-foot-and-mouth disease.

Dr Doss concluded that some paediatric skin conditions are hard to diagnose and treat in Tunisia. Rare diseases should be included in a differential diagnosis of many common diseases.

1. Doss N, et al. Paediatric Dermatology. Across the Board Session, ICD 2021, 10–13 November.

11. Registry of vitiligo patients aims to break the stigma

Vitiligo is a common, acquired, discolouration of the skin. While vitiligo is hardly a disease with a high medical burden, there is a social stigma attached to it because of cosmetic reasons. To raise awareness, in this case in the Russian society, a platform for vitiligo patients has been created to monitor the disease and offer expert advice.

Vitiligo is a condition that causes loss of skin colour in patches caused by the lack of melanin. "It is both a medical and a social problem that remains unsolved as there is no effective treatment," explained Dr Valentina Petunina (Pirogov Russian National Research Medical University, Russia) [1]. Vitiligo is considered an autoimmune disease, which raises questions about the role of vitiligo as a predictor of other autoimmune diseases. The disease progression of vitiligo is thought to mainly depend on climatic conditions and environmental factors.

Currently, there is no organisation for patients with vitiligo in Russia. Data on vitiligo patients is limited in general, as patients often do not seek help. To understand how vitiligo influences patients' lives, Russian scientists have developed an online registry

where patient information is gathered. This includes laboratory parameters as well as the identification of risk factors. Patients are asked to fill out a medical questionnaire focusing on environmental variables, ethnicity, history of vitiligo and autoimmune pathology in family members, trigger factors of exacerbation, and onset of the disease. Data on the efficacy of vitiligo therapy and quality of life is also collected. To date, the medical information of 64 patients has been available for the project. To further upgrade this new platform, a professional society was created that not only collects more epidemiological data but is also aimed at improving the quality of medical care for patients. For example, patients and physicians can ask questions and request advice from experts on the platform.

In short, a Russian registry has been developed for vitiligo patients to collect data on the disease progression and to provide a platform for advice.

1. Petunina V, et al. Russian registry of patient's management with vitiligo. Abstract 198, ICD 2021, 10–13 November.

12. Ceramides and their role in skincare

The critical characteristic of an impaired skin barrier in the pathogenesis of atopic dermatitis (AD) is well-evidenced and seems to be genetically driven. As ceramides play a key role in skin barrier function, dermatologists should recommend the use of ceramides in skincare to moisturise and repair skin.

Skin barrier dysfunctions play a primary role in AD pathogenesis. There are several common barrier defects of which many have a genetic origin. In general, genetics and environmental factors contribute most to stratum corneum defects. Prof. John Su and Dr Katherine Armour (Monash University; Dermatology Institute of Victoria, Australia) shared their vision on ceramides in skin barrier improvement [1].

Ceramides are the main component of the stratum corneum of the epidermis. Along with cholesterol and saturated fatty acids, they create a water-impermeable layer that prevents the entry of microorganisms. Thus, ceramides are a natural moisturising factor that helps in barrier formation, function, and repair. Natural ceramides in the skin fluctuate with seasonal changes and reduce with ageing, AD, and psoriasis. For example, dry skin has fewer and shorter chain ceramides, specifically lacking the ceramide EOP. Eczema-prone skin is also associated with a deficient level of ceramides.

Research has shown that daily moisturising increases the time until the next AD flare-up. Dermatologists generally recommend cleaning the skin thoroughly but gently and carefully. There is no standard frequency or duration for bathing, but low pH, hypoallergenic, fragrance-free cleansers should be recommended. After bathing, it is important to pat the skin gently and to apply a moisturiser immediately to increase hydration. Ceramides EOP, NP, and AP are the most worthwhile ingredients to look for in skincare products.

Other additives that can be added to skincare to improve barrier function include zinc sulphate and copper sulphate (antibacterial action), niacinamide (barrier support, anti-inflammatory), and colloidal oatmeal (anti-pruritic, anti-inflammatory, antioxidant).

In conclusion, ceramides are lipids that are found naturally in high concentrations in the stratum corneum. They can be naturally reduced due to several factors, but adding them through ceramide-rich skincare supports skin barrier repair and function.

1. Su J, et al. Atopic skin: A close-up upon skin barrier dysfunction. BIODERMA (NAOS) Symposium, ICD 2021, 10–13 November.

13. 10% thioglycolic acid gel peels: a safe and efficient option for pigmented purpuric dermatosis

Pigmented purpuric dermatosis (PPD) is a dyspigmentation skin disorder. A treatment option for PPD that has been considered is 10% thioglycolic acid (TGA), which has shown efficacy and safety in a pilot study.

PPD is a chronic condition characterised by reddish-brown skin lesions caused by capillaritis. Although it can arise on any part of the body, lesions are usually found on the legs. While benign, PPD can cause considerable cosmetic concern. There is no effective treatment available for PPD, which calls for new therapies to be explored. The use of 10% TGA gel was found to be effective for pigmentary dermatoses in general. Thus, Dr Arunima Ray (IMS and SUM Hospital, India) and her team conducted a pilot study to assess the efficacy and safety of 10% TGA in the clearance of PPD [1].

A prospective, right-left leg comparative pilot study was conducted in patients with bilateral PPD over the legs. Peeling sessions were done in a tertiary hospital in Eastern India. The peel was applied weekly on the left leg for 6 weeks, while the right leg remained untreated. Photographs and

dermoscopic images were evaluated at baseline and weeks 3 and 6. Patient self-assessment and dermatologists' assessment were compared. Side effects were monitored during the peel application and afterwards.

Of 10 patients included, 4 observed mild improvement, 5 moderate improvement, and 1 marked improvement. According to the physician's assessment, 2 patients had >60% improvement, 5 patients had 30–60% improvement, and 3 patients had <30% improvement. Dermoscopic assessment showed a decrease in red dots and intensity of brownish pigment at 6 weeks in all patients. An increase in scaling was seen in the post-peel period in all patients. Side effects were mild, including burning sensation, foul smell, and persistent smell during peel application. One patient had post-procedural erythema, pain, and swelling of the peeling site for 5 days, which was resolved with topical mometasone.

In conclusion, 10% TGA was effective in the partial clearance of PPD dyspigmentation with weekly sessions for 6 weeks without any serious side effects. While TGA peel is commercially unavailable in India, topical TGA can be safely used at less than 15% concentration.

1. Ray A, et al. Use of 10% thioglycolic acid peel in treatment of pigmented purpuric dermatoses – a pilot study. Abstract 220, ICD 2021, 10–13 November.

14. Benefits of microneedling with platelet-rich plasma for acne scars

Microneedling is a non-invasive procedure that uses fine needles to create micro-injuries in the skin. During this process, the skin produces more collagen in an effort to heal the small wounds caused by the needles. It is a safe and effective treatment option for acne scars. The addition of platelet-rich plasma (PRP) makes microneedling even more effective.

Acne scars are one of the most common challenges that Dr Jaishree Sharad (Skinfiniti Aesthetic Skin and Laser Clinic, India) faces in her dermatology clinic [1]. Treatment modalities for depressed scars include surgical methods such as subcision, punch elevation, and dermabrasion. Several non-surgical treatment options may be appropriate for acne scars, including topical creams, skin fillers, chemical peels, microdermabrasion, and laser.

Microneedling is another non-invasive procedure that shows promise in acne scar treatment. The procedure creates microchannels in the skin, resulting in a controlled skin injury with minimal epidermal damage. This stimulates dermal wound healing through increased collagen production. Evidence has shown that the use of PRP benefits quicker wound healing. Thus, microneedling with PRP is a safer option for dark skin. Dr Sharad mentioned that patients hardly have any oedema the next day. The microneedling sessions in her clinic are often combined with other cosmetic treatments such as laser treatment or chemical peels. To get the full benefits of microneedling, 4 to 6 monthly sessions are required.

The first few days after a microneedling procedure come with some instructions. Post-procedure care includes the application of a thin layer of mupirocin ointment on the treated areas together with an antibiotic cream. Sun exposure must be avoided, which makes sun protection both before and after the procedure mandatory. It is also crucial to not apply any makeup to the face for at least 24 hours after the appointment.

Taken together, microneedling has shown a minimal risk of infection. The healing period is short as the epidermis stays intact. It is safe in all skin types, including dark skin. PRP should be considered as an addition as it contributes to wound healing and collagen remodelling.

1. Sharad J. A mix and match of microneedling with other modalities for the treatment of acne scars. Symposium: Fractional Devices, ICD 2021, 10–13 November.