Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Clinical analysis of Hidradenanthoma simplex

N Wang and Y Zheng

Department of Dermatology, the Second Affiliated Hospital of Xi’an Jiaotong University, Xi’an, Shaanxi, China

Objective: To investigate the clinical, histopathological findings, immunohistochemical features and therapeutic methods of hidradenanthoma simplex (HS). Methods: The clinical presentation of HS is very difficult, it is often difficult to determine the correct diagnosis of patients with HS diagnosed between January 2015 and August 2020 in the Second Affiliated Hospital of Xi’an Jiaotong University and 17 patients with HS reported in the literature searched in CNKI were retrospectively analyzed. Results: Mean age at onset of the skin eruption was 62 years (range 34-86 years), 14 patients (63.6%) were female, and the skin lesion had been present for a mean of 7.84 years (range 5 months-50 years). Typical clinical findings were keratotic plaques mainly distributed the lower extremities and the trunk. Skin biopsy specimens from 22 patients showed the “Ladewig phenomenon” and was composed of island basoloidal cells that were smaller than neighboring epidermal keratinocytes. Intraepidermal glyceron and occasional ductal structures within the nests of cells were also found. And one case (4.5%) was diagnosed as malignant HS. Immunohistochemically, the cytoplasmic storage of tumor cells exhibited positive staining for CK14, CK19, and CK20. The epidermal ductal structure showed a positive reaction of CEA. Most patients (81.8%) chose surgical resection and no recurrence and malignant transformation in follow-up. Conclusion: HS is a rare intraepidermal benign tumor, but it has risk of malignant transformation. And this disease mostly occurs in female patients, which is different from previous literature reports. For dermatologists, it is extremely important to correctly recognize and diagnose this disease.

Validation of the Optimal Psoriasis Assessment Tool (OPAT) as a method of assessing psoriasis severity and impact from physician and patient perspectives

C Leonard,1 RB Warren,2 K See,2 R Burge,2 G Gallo,2 M McKeen-Matthews,2 S Park,3 C de la Cruz,2 ST Saved1 and RB Striker1,2 1 Central Dermatology, St Louis, Missouri, United States 2 Dermatology Centre, SRFT, University of Manchester, United Kingdom 3 Eli Lilly and Company, Indianapolis, Indiana, United States 4 Synexus Health Inc, Raleigh, North Carolina, United States 5 Clinica Dermascocco, Santiago, Chile 6 Am Shams University, Cairo, Egypt 7 Yale University, New Haven, Connecticut, United States and 8 Central Connecticut Dermatology Research, Cromwell, Connecticut, United States

OPAT is a simple tool to assess psoriasis severity using two measures: one clinical body surface area (BSA) and at least one of the following patient reported outcomes (PRO) — itch, skin pain, or patient global assessment of disease severity (PatGA). Previous results show that OPAT provides a straightforward and practical alternative to the Psoriasis Area and Severity Index (PASI). OPAT was found to be a promising tool from the current research settings but rarely adopted as a clinical practice due to its complexity. Furthermore, PASI does not capture patient perspectives. A correlation between OPAT scores and Dermatology Life Quality Index (DLQI) has also been shown. This analysis aimed to validate OPAT scores using PASI and DLQI data from the IORAR trial. Patients with moderate-to-severe plaque psoriasis (N=1027) were randomly assigned to receive guselkumab (N=507) or ixekizumab (N=520). Pearson correlations were calculated for BSA and PRO measures versus PASI and DLQI at baseline, weeks 4, 8, and 12. The results from regression analysis for PASI using two measures, BSA and one PRO assessment, at week 12 showed high correlation (0.80 (PatGA), 0.78 (skin pain), 0.87 (itch)). Sensitivity analyses for OPAT versus PASI scores confirmed the results with a PASI75 sensitivity of 88.0% for the BSA and PatGA model and 85.5% for the BSA and itch model. The sensitivity of PASI50 was 87.9% for the BSA and PatGA model and 84.0% for the BSA and itch model. OPAT provides a simple alternative to assess psoriasis severity, utilizes both physician and patient perspectives, and can be easily adopted into routine clinical practice.

Moisturizer prevents skin barrier damage induced by prolonged face mask usage

L Feng,1 Q Zhang1, N Ruth,1 Y Wu,2 C Saliou3 and M Yu1 1 Global Clinical & Consumer Science, Este Lauder Companies, New York, New York, United States and 2 Department of Dermatology, Peking University First Hospital, Beijing, Beijing, China

Prolonged wearing of face masks, a new daily practice for people due to the COVID-19 pandemic, introduces high levels of humidity locally to facial skin, which may have unexpected skin health consequences. An IRB approved double-blinded, randomized, split-face clinical study was conducted to investigate skin properties after repeated prolonged mask usage by comparing skin inside and outside of the mask-covered areas. Twenty-one healthy female volunteers wore face masks for at least 6 hours every day for one week, with one side of their face treated with a moisturizer three times daily. On day 8, and after 5 hours of wearing the mask, facial skin properties (sebum, hydration and TEWL) were assessed at 15, 30, 60, and 120 min post-mask removal, followed by barrier disruption and recovery evaluations. Mask usage compromised facial skin properties compared to uncovered areas, including significantly larger reduction of skin hydration (p = 0.02 at 15 min) and a weakened stratum corneum barrier in response to tape strip challenge (p = 0.01 after stripping). Sebum production also increased significantly (p = 0.01 at 15 min). Notably, applying a daily moisturizer mitigated these effects by significantly increasing and maintaining two-fold more hydration (p = 0.01) and strengthening barrier integrity against barrier challenge. Daily and prolonged usage of a facial mask, which is an essential personal and public health practice due to the Covid-19 pandemic, can create a high-humidity microenvironment, which may negatively impact skin properties. However, facial moisturization can help maintain skin hydration under the mask.

Dermoscopic findings and HPV genotypes of genital keratotic lesions: Bowel-like keratosis, seborrhoeic keratosis, and condyloma acuminatum

K Lachance1,2, DS Hippe3, K Cahill4, T Akaike5, AS Fonseca6 and PG rheuma1 1 Fred Hutch, Seattle, Washington, United States 2 Univ. of WA, Seattle, Washington, United States and 3 University of Pennsylvania, Philadelphia, Pennsylvania, United States

Implementation science (IS) has been recognized for its potential to improve the integration of evidence-based practices into routine dermatology care. The COVID-19 Pandemic led to rapid telemedicine implementation by dermatologists worldwide. We aimed to use tools from IS to identify factors associated with the successful implementation of telemedicine during the COVID-19 crisis. An anonymous, online survey was distributed to Association of Professors of Dermatology (APD) members. It incorporated sub-scales from the Organizational Readiness to Change Assessment, a validated measure of organizational characteristics that predict successful IS implementation, to a physician’s baseline positive titers being below 100 and others being above 100,000. Here, we sought to create a web-based model that uses antibody test results to determine whether or not a patient’s MCC has recurred. Our cohort consisted of 268 sero-positive patients with 1,613 antibody tests. Median follow-up was 2.9 years and 82 patients had a recurrence. A Cox model was developed using continuous, time-varying covariates. This model quantifies the absolute risk of recurrence based on the diagnosis date, current test date, previous titer and most current titers. The change in titer was strongly predictive of recurrence (HR: 1.77 for each 2-fold increase of titer, 95% CI: 1.47-2.12, p<0.001), independent of the current titer and time from diagnosis. This web-based tool should improve interpretation of antibody test results to guide patient-specific surveillance plans. We are currently assessing whether variables such as patient variables, insurance variables and time from diagnosis. This web-based tool should improve interpretation of antibody test results to guide patient-specific surveillance plans. We are currently assessing whether variables such as patient variables, insurance variables and time from diagnosis.