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.

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Clinical epidemiology of Masson tumor

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Intravascular papillary endothelial hyperplasia (IPEH), also known as Masson tumor—a rare, benign vascular lesion typically presenting in the skin as a subcutaneous nodule — may be clinically mistaken for other neoplasms such as hemangiomas and lipomas. IPEH is classically categorized into three types:1) pure type arising in dilated endovascular spaces; 2) mixed type developing from preexisting vascular abnormalities; 3) extravascular type. While the prognosis of IPEH is excellent, it must be differentiated from malignant tumors such as angiosarcomas, which may require intensive treatments. Because the literature on IPEH is limited, we sought to characterize clinical and pathological features of IPEH. Subjects were identified using the Mass General Brigham (MGB) Research Patient Data Registry and included individuals with pathologically proven diagnosis of IPEH from 1/1980 to 8/2021 at Massachusetts General Hospital, Brigham and Women's Hospital (BWH), and the BWH Faulkner Hospital. Demographic information, clinical documentation, and pathology reports were reviewed for data extraction. 261 individuals were diagnosed with IPEH, with the majority being women (60%) and white (74%). The average age at diagnosis was 53 years old [4-98 years old]. The most frequently involved anatomic sites were the upper (29%) and lower (24%) extremities. Common initial clinical diagnoses of lesions were cysts, hemangiomas, and lipomas. The pure subtype of IPEH was the most common (50%), followed by the mixed (46%) and extravascular subtypes (4%). Extravascular IPEH occurred more frequently in women (5%) compared to men (1%). We found that most clinicians' initial impressions prior to biopsy did not include the final diagnosis of IPEH – often using vague terms such as "soft tissue mass" – indicating a potential need for greater awareness of this condition. Given the differential diagnosis of IPEH often includes conditions such as melanoma or angiosarcoma, clinicopathologic correlation is of utmost importance for this uncommon vascular lesion.

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Erythema multiforme in COVID-19 patients and following COVID-19 vaccination

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Background: During the Severe acute respiratory syndrome coronavirus 2 pandemic, dermatologic complications have been reported in the setting of coronavirus disease 2019 (COVID-19) infection as well as its treatment. The aim of this systematic review is to assess the published cases of EM associated with COVID-19 infection and vaccination. Methods: We searched Google Scholar, PubMed, Springer, Ovid, and Science Direct. Results: Regarding studies related to EM after COVID-19 vaccination, 6 articles were initially identified in the literature search, of which 2 were duplicates, and 4 studies were ultimately included that described 8 cases of EM after COVID-19 vaccines, 3 after Moderna (37.5%), 4 after Pfizer (50%), and one report after CoronaVac (12.5%). In terms of studies related to EM in patients with COVID-19, 113 articles were initially identified in the literature search, of which 31 were duplicates. After screening for eligibility and inclusion criteria, 23 publications were ultimately included that reported 36 cases of EM in patients with COVID-19 infection, with 19 males (53%). Five of 36 patients (13.9%) presented with EM before any classic COVID-19 symptoms as a first presentation of the disease. Three patients (8.3%) presented with EM and COVID-19 symptoms simultaneously. However, in most of the patients (78%), EM started after COVID-19 symptoms. Eight patients (22.2%) did not take any medications before skin rash and therefore presented with COVID-19 associated EM. However, 78% (28/36) patients took medications before EM. Conclusions: Since some patients did not take any drugs, we believe that the underlying mechanism could be a delayed immune response to the COVID-19 infection as a sole reason for EM in some cases. Accordingly, EM may result from the interaction between the virus itself, antiviral immune response, and drugs.

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Prevalence of rosacea in transgender and gender diverse populations: A retrospective cohort study

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The prevalence of rosacea has not been well studied in the transgender and gender-diverse (TGD) populations. We sought to determine the prevalence of rosacea among TGD patients receiving masculinizing gender-affirming hormone therapy (mGAHT) and feminizing GAHT (fGAHT) compared to cisgender patients. We conducted a retrospective cohort study using electronic health records from TGD and cisgender adult patients seen at Fenway Health between August 1, 2014 and August 1, 2020. Adjusted risk ratios (aRR) and 95% confidence intervals (CI) were calculated using log binomial regression and adjusted for age, race, smoking status, hyperlipidemia, hypertension, and HIV. We compared TGD patients receiving mGAHT and TGD patients receiving fGAHT each to comparison groups of cisgender men, cisgender women, and TGD patients not on GAHT. Of the 46,507 patients identified, there were 1,394 TGD on fGAHT, 1,576 TGD on mGAHT, 25,594 cisgender men, 16,961 cisgender women, and 982 TGD patients not on GAHT. In the multivariate analyses adjusting for relevant demographic and clinical factors, TGD patients on fGAHT had a decreased prevalence of rosacea compared to cisgender women (aRR: 0.22 (95% CI: 0.08,0.58)), cisgender men (aRR: 0.32 (95% CI: 0.12,0.87)), and TGD patients not on GAHT (aRR: 0.23 (95% CI: 0.081, 0.79)). TGD patients on mGAHT did not have a significant difference in prevalence of rosacea compared to cisgender women (aRR: 0.92 (95% CI: 0.54,1.56)), cisgender men (aRR: 1.37 (95% CI: 0.81,2.32)), or TGD patients not on GAHT (aRR: 0.84 (95% CI: 0.38,1.84)). TGD patients on fGHAT had a lower prevalence of rosacea compared to cisgender patients and TGD patients not on GAHT, suggesting that estrogen or anti-androgenetic agents may be protective.

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Development and validation of a caregiver-reported numeric rating scale for measuring pruritus in children aged 6 months to <6 years with atopic dermatitis

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Pruritus is the most burdensome symptom of atopic dermatitis (AD). A novel 11-point caregiver-reported worst scratch/itch numeric rating scale (WSI NRS; from 0 [no itching] to 10 [worst itching possible]) to assess pruritus in young patients with moderate-to-severe AD was developed and evaluated. Qualitative interviews were conducted with 24 caregivers of children with AD aged 6 months to <6 years to evaluate content validity. Caregivers understood the WSI NRS and were able to select a response without difficulty. Caregivers endorsed "scratching/itching" as optimal phrasing for their observation of behaviors and representation of their child's itch severity. Psychometric evaluations of the instrument were performed using data from a Phase 3 study of dupilumab in 161 children (aged 6 months to <6 years) with moderate-to-severe AD (NCT03346434). The test-retest reliability intraclass correlation coefficient (95% CI) was 0.94 (0.89, 0.96), above the recommended 0.70 threshold. The WSI NRS showed moderate to strong correlations with assessed caregiver/patient/clinician-reported clinical outcome assessments (COAs), supporting the convergent and divergent validity of the instrument. The discriminating ability of the WSI NRS was shown by significant differences in WSI NRS scores between patients grouped into COA-based bands. Anchor-based methods supported the use of at least a 2 to 4—point change in WSI NRS as clinically meaningful. These results indicate that the caregiver-reported WSI NRS is a valid, reliable and responsive instrument to assess pruritus in young children with moderate-to-severe AD.

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Management of the heightened risk for clinical events from atherosclerotic cardiovascular disease (ASCVD) in an established cohort of lupus erythematosus patients

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Lupus erythematosus (LE) patients are at heightened risk of clinical events, chiefly heart attacks and strokes, caused by ASCVD. To address this problem, we recently proposed new guidelines for categorization of levels of risk for ASCVD events in LE patients, with corresponding recommendations for management of conventional risk factors, chiefly hypercholesterolemia, hypertension, smoking, and diabetes mellitus (Keyes E et al. 2021). Here, we performed a single-center study of our established cohort of cutaneous LE patients without or with concurrent systemic LE (n=370). Our goal was to assess how current management compares with the newly proposed guidelines. Of our LE cohort, 336/370 (90.8%) had a designated primary care physician. By the newly proposed guidelines, the most recent plasma low-density lipoprotein cholesterol (LDLc) levels for 254/370 (68.6%) of the LE cohort were above goal. Of those 254 LE patients with above-goal LDLc, the following were not on any LDL-lowering medications: 13/15 (86.7%) classified at high ASCVD event risk, 121/177 (68.4%) at very high event risk, and 24/62 (38.7%) at extreme ASCVD event risk. The American College of Cardiology calculator for the 10-year risk of an ASCVD event could be used on 248/370 (67.0%) of the LE cohort. Of those 248 LE patients, the following were not on LDL-lowering medications: 109/129 (84.5%) who had a calculated 10-year event risk <5%, 34/49 (69.4%) with 5-<10% risk, 23/43 (53.5%) with 10-<20% risk, and 11/27 (40.7%) with ≥20% risk. Of LE patients with clinically evident ASCVD, 36/82 (43.9%) were not on LDL-lowering medications. We conclude that LE patients are undertreated for conventional ASCVD risk factors. Efforts to improve the problem are underway.

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Proposing a standardized assessment of COVID-19 vaccine cutaneous reactions

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Introduction: COVID-19 vaccine skin reactions are increasingly well characterized. However, no standard grading scale exists for the spectrum of cutaneous reactions after vaccination. COVID-19 vaccine clinical trials used the U.S. FDA's Toxicity grading scale for healthy adult and adolescent volunteers enrolled in preventive vaccine clinical trials. Only local injection site cutaneous reactions were categorized on this scale, with little granularity to grading of other cutaneous reactions. This incomplete picture restricts proper severity grading, assessment, and treatment of dermatology patients. Methods: A literature review of severity grading scales was conducted for MeSH terms: allergic reactions, drug reactions, and dermatological conditions using a standardized PubMed/Medline database search strategy, and their relevancy to grading COVID-19 vaccine cutaneous reactions was assessed by study authors using a standardized data extraction tool. Results (Proposal): Out of 30 articles assessed for inclusion, we extracted 10 relevant severity grading scales for drug and vaccine reactions. The FDA's toxicity grading scale contains relevant details on local reactions but lacked detail on other rashes seen after vaccination. The Brighton Collaboration criteria, Ring and Messmer scale, and NIAID/FAAN criteria were useful for anaphylaxis; however, they are unable to account for delayed or chronic cutaneous reactions after vaccination. The scale that could capture the broadest spectrum of COVID-19 vaccine cutaneous reactions was the National Cancer Institute's Common Terminology Criteria for Adverse Events (CTCAE), which has been previously adapted for drug-induced cutaneous reactions. We therefore mapped known COVID-19 vaccine cutaneous reactions to the FDA's toxicity grading scale (local reactions) and the NCI's CTCAE scale (distal/generalized reactions). Conclusion: Adopting standardized terminology and grading for COVID-19 vaccine cutaneous reactions will assist researchers and clinicians in better characterizing vaccine reactions and providing appropriate counseling for patients.