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Pediatric patients with orofacial granulomatosis likely to develop intestinal Crohn disease

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Orofacial granulomatosis (OFG) is a rare mucocutaneous disorder characterized by persistent granulomatous perioral inflammation in the absence of systemic disease. There is continued debate regarding whether OFG is a distinct clinical disorder or a manifestation of orofacial Crohn disease (CD) given indistinguishable clinical and histologic features. We aimed to determine if there is a relationship between a diagnosis of biopsy-proven OFG in the absence of systemic disease and the subsequent diagnosis of intestinal CD in a pediatric patient population. A retrospective chart review from 2000 to 2018 at a single tertiary pediatric hospital was performed. Seven patients met inclusion criteria of receiving a diagnosis of OFG in the absence of previous or concurrent diagnosis of inflammatory bowel disease. Four patients were subsequently diagnosed with intestinal CD during the study period with a median time to diagnosis of 36 months (range 4-72 months). The remaining three patients have no diagnosis of intestinal CD to date with a median follow-up time of 3 months (range 2-17 months). Similar to previous studies, our case series demonstrates that pediatric patients diagnosed with OFG are likely to receive a subsequent diagnosis of intestinal CD. At minimum, Gastroenterology evaluation is warranted with long-term monitoring for any signs of intestinal CD.

Commercial disclosure: None identified.

16783

Prompt identification of primary cutaneous nocardiosis utilizing immunohistochemical staining: A case report

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A 72-year-old man with a history of renal transplantation (maintained on mycophenolate, tacrolimus, and prednisone) sustained a laceration to the right forearm after a fall onto gravel. Three weeks later, he reported onset of a painful, pustular rash of the right extensor arm. Before admission, he did not respond to outpatient clindamycin or ceftriaxone. HSV/VZV PCR swabs, blood cultures, and tissue fungal stain were negative. Preliminary hematoxylin and eosin evaluation showed extensive dermal neutrophilic infiltrate. Acid-fast bacilli (AFB) culture smear showed 2+ AFB with initial concern for a rapidly growing nontuberculosis mycobacterium. However, tissue gram and acid-fast stains showed rare, equivocal and weakly staining filamentous structures within dermal abscesses, which were highlighted and confirmed by immunohistochemical (IHC) staining. Consequently, the patient was diagnosed with primary cutaneous nocardiosis, and the antimicrobial regimen was altered, resulting in gradual clinical improvement on linezolid and amoxicillin-clavulanate. The presented case demonstrates the diagnostic challenge of distinguishing *Nocardia* from mycobacteria, as both grow on the same media, show similar colony morphology, and demonstrate acid-fast staining. Unfortunately, features of *Nocardia*, such as acid-fast staining and filamentous cell morphology, can be equivocal. We utilized a mycobacterium tuberculosis IHC stain with cross-reactivity to *Nocardia* to rapidly confirm our suspicion. In the current case, the utilization of an IHC stain allowed for prompt presumptive identification of *Nocardia* (initially thought to be NTM) and subsequent timely alteration of antimicrobials prior to confirmation of *Nocardia brasiliensis* via culture.

Commercial disclosure: None identified.

16785

Relationship between acne and use of cosmetics: Results of a questionnaire study in 216 Korean individuals

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Background: Acne vulgaris is one of the most common dermatologic diseases, and it is known that various factors are related. In particular, although the use of cosmetics is thought to be associated with acne, few studies have been conducted up to date.

Objective: To survey the perception regarding acne causation and exacerbating factors, including cosmetic exposure, as well as acne treatment history.

Methods: and Materials: A total of 216 patients with acne vulgaris, who visited for treatment at local dermatologic clinic and college hospital in Korea, were asked to complete a questionnaire regarding the epidemiology, clinical features, and perception of acne.

Results: Three most common factors believed to trigger or exacerbate acne were lack of sleep, high-glycemic-load foods, and cosmetics. Among the respondents, 62 (29.95%) said the use of cosmetics was associated with acne exacerbation. One hundred thirty-seven respondents with acne treatment failure history used more cosmetics compared with other group. Foundation use was 44.5% for treatment-refractory patients and 28.6% for others, respectively ($P < .05$). The use of compacts, cushions, concealers, and double-cleansing was also higher in the treatment-refractory group, which turned out to be statistically significant ($P < .05$).

Conclusions: Our finding reveals a positive association between frequent usage of cosmetics and severity of acne. Regular cosmetic usage might be a causative factor for acne vulgaris. However, dermatologists occasionally overlook the importance of cosmetics, which may compromise the efficacy of acne treatment. Therefore, it is essential to aware patients that use of cosmetics can be a potential aggravating factor for their acne.

Commercial disclosure: None identified.

16796

Graft-versus-host disease–like erythroderma associated with aggravation of thymoma

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Thymoma-associated multiorgan autoimmunity (TAMA) is a rare paraneoplastic disease defined as thymoma with liver, intestine or skin manifestations, which resembles graft-versus-host disease (GVHD) histopathologically in the absence of hematopoietic stem cell transplantation. A 76-year-old woman who had been diagnosed with invasive thymoma presented with scaly erythema and reddish papules across the trunk. She had been admitted to internal medicine because of febrile sensation and general fatigue suspecting meningitis. The initial differential diagnosis for her cutaneous lesions included drug eruption due to antibiotics and viral exanthem. Antibiotics were stopped and she was treated with topical steroid, oral antihistamine. But there was no effect on skin lesion, which then spread rapidly to the whole body. And she died of aggravation of thymoma a few days later. The pathologic findings of a biopsy specimen from the abdomen revealed parakeratosis, many apoptotic cells in the epidermal layer, perivascular and interface dermatitis with lymphocytic infiltration. Theses pathologic findings were similar to those seen in GVHD. Interestingly, she never underwent allogenic stem cell or solid-organ transplantation. Given the presence of GVHD-like skin symptoms and aggravation of thymoma, the diagnosis of thymoma associated GVHD-like erythroderma, one of the findings in thymoma-associated multiorgan autoimmunity, was made.

Commercial disclosure: None identified.