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A cross-sectional study on the association between COVID-19 infection and hospitalization in patients with alopecia areata

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As levels of COVID-19 rise, studies assessing increased psychological stress and their impact on common "stress-sensitive" skin conditions, including alopecia areata (AA), have been reported. We aim to compare the rates of COVID-19 infection and hospitalization among AA patients to the COVID-19-tested population in the University of California COVID Research Data Set (UC CORDS); a centralized, HIPAA Limited Data Set providing access to health records for patients receiving COVID-19 testing across five UC medical institutions (n = 199,361). Clinical data associated with patients diagnosed with patchy AA, alopecia totalis (AT), and alopecia universalis (AU) who received COVID-19 testing were collected. The overall UC CORDS COVID-19 positive test rate was 3.9% (n = 7835, 49% men, avg age 42). Only 552 patients were identified with a diagnosis of AA/AT/AU, of which 3.6% (n = 20, 45% men, avg age 36) were COVID-19 positive. This was not significantly different from the overall database (P = .7102). The COVID-19 positive rate for AA/AT/AU patients hospitalized within 4 weeks of COVID diagnosis was 2.9% (n = 2, 50% men, avg age 40) which was also not significantly different from the UC CORDS hospitalization rate of 4.4% (n = 1748, 58% men, avg age 56) (P = .5512). Data on patient medical history or medications was not collected due to de-identified nature of the database. Our results indicate reasonable evidence of no increased risk of COVID-19 infection, irrespective of hospitalization rates, among patients with AA/AT/AU. Future studies with more expansive databases will help assess this relationship further, or effects of any medication.

Commercial Disclosure: None identified.

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Dermatomyositis mimicking hypertrophic lichen planus

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We present a case of a 52-year-old African American female with a new onset cutaneous eruption clinically consistent with hypertrophic lichen planus, in the setting of a 5-year history of proximal muscle weakness and difficulty swallowing. A muscle biopsy performed 4 years prior was significant for central nucleation with myofiber necrosis and prominent perivascular and periendomysial lymphocytic infiltrates. She was subsequently diagnosed with polymyositis, presumably secondary to statin therapy, which was discontinued without improvement in her symptoms. Upon clinical evaluation, grouped violaceous flat-topped papules and small plaques on the extensor arms, thighs, upper chest, and forehead were observed. The rash was noted to be photosensitive and pruritic. Skin biopsy revealed interface dermatitis, suggestive of lupus, dermatomyositis, or photodermatitis. Laboratory evaluation was significant for weak positive Mi-2 autoantibodies and elevations in creatinine kinase (1007 U/L, reference 22-269 U/L), aldolase (14.3 U/L, reference 1.5-8.1 U/L), and lactate dehydrogenase (452 U/L, reference 125-220 U/L). Failed therapies included hydroxychloroquine, as well as oral methotrexate in combination with oral prednisone and topical corticosteroids. Based on histopathologic and laboratory findings, she was diagnosed with dermatomyositis and intravenous immunoglobulin therapy was initiated at 70 g (1 g/kg) daily for 2 days every 4 weeks with ongoing treatment with improvement. This case is a unique presentation of dermatomyositis clinically mimicking hypertrophic lichen planus. To our knowledge, there is minimal published literature describing lichen planus-like eruptions in patients with dermatomyositis, with only a single previous case report of a dermatomyositis-lichen planus overlap syndrome.

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Cervicofacial actinomycosis: A unique diagnostic challenge in a middle-aged male.

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Actinomycosis is a rare bacterial infection caused by the *Actinomyces* spp, with roughly three new cases per 100,000 people per year. *Actinomyces israelii* is the pathogenic agent behind approximately 70% of all cervicofacial actinomycosis cases. A history of a recent dental procedure is frequently elicited upon questioning, as trauma is the most crucial predisposing factor to this infection. Our case follows a 54-year-old Hispanic male who presented to our dermatology clinic for evaluation of a nonresolving erythematous plaque of 8-month duration on the left nasolabial fold. Physical examination revealed a 1.0 × 2.0 cm pink-to-light brown indurated plaque with central purulent material. Upon palpation, there was no palpable connection to the oral cavity, mandibular unit, mucosa or gingiva. The patient denied any tenderness, discharge, or associated bleeding from the lesion. There was no recent history of dental cleanings or procedures. The patient underwent facial computed tomography without contrast, which demonstrated a 3.0 × 3.0 × 1.7 cm area of subcutaneous complex material surrounding the left upper canine with anterior cortical breakthrough. Two 3.0-mm punch biopsies were performed. Evidence of Gram-positive filamentous rods on hematoxylin and eosin routine histology in combination with an appropriate clinical picture aids in securing a diagnosis of Actinomycosis. While the current treatment of choice for Actinomycosis continues to be penicillin, alternatives include tetracycline and macrolide antibiotics. This patient was started empirically on doxycycline 100 mg twice a day for a total of 6 weeks and responded briskly with no recurrence to date.

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Oxygen-enriched operating rooms and surgical fires: An underestimated risk of ambulatory dermatologic surgery

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Dermatologists perform a number of office-based surgical procedures; therefore, they are faced with a unique challenge to create a safe and controlled operative setting. Oxygen-enriched environments created by nasal cannulas, nebulizers, or oxygen cylinders complicate the set-up of an ambulatory operating room (AOR), as the gas can accelerate combustion and facilitate fire ignition. While the risk of surgical fires is low, the risk can be diminished with proper education and preoperative risk assessments. An educational technique for the surgical team on combustible materials in the AOR and how to approach oxygen-dependent patients is discussed. The fire triangle model educates the entire team on potential fuels and heat sources. While it may be difficult to substitute routine surgical materials and cautery instruments, dermatologic surgeons may have more control over the oxidants present in their AORs. Surgeons should perform a pre-operative risk-assessment on their oxygen-dependent patients to determine if they are eligible for outpatient surgery, specifically noting the ability to tolerate oxygen-free periods. If the surgery is performed without supplemental oxygen, periodic clinical evaluations should be performed, and continuous pulse oximetry measurements should be considered. If the patient requires continuous oxygen therapy, the surgeon should consider a referral to a different surgical specialty for management with an anesthesiologist present. As a specialty that performs a significant amount of outpatient surgical procedures, it is important that dermatologists are vigilant in their efforts to recognize and eliminate the risk of surgical fires.

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