

INTRALESIONAL CORTICOSTEROIDS AS ADJUNCTIVE THERAPY FOR REFRACTORY CUTANEOUS LESIONS IN CHRONIC GRANULOMATOUS DISEASE

Michelle M Joseph¹, Nicholas Rider², Filiz Seeborg², Lenora Noroski², Sarah Nicholas², Sara Anvari², Meera Gupta², Lisa Forbes², Ivan Chinn², Carla Davis², Mansi James², Veronica Diaz², Roman Deniskin²

¹ Baylor College of Medicine, Department of Texas Children's Hospital

² Texas Children's Hospital, Allergy and Immunology William T. Shearer Center for Human Immunobiology, Immunology, Allergy and Retrovirology

Background: To assess other alternative therapies when first line treatments have failed for chronic wounds in the setting of Chronic Granulomatous Disease (CGD). A 15-year-old male with X-linked Chronic granulomatous disease (CGD) complicated by severe perianal disease and proctocolitis presented with two weeks of open draining lesions on the thighs, bilateral inguinal regions, and gluteal cleft. The wounds became excruciating and prevented normal ambulation. The patient was admitted for IV antimicrobial therapy, local wound care and systemic steroids. Wound cultures, throughout his course, yielded growth of *Klebsiella pneumoniae*, *Candida parapsilosis*, *Malassezia globosa*, *Escherichia coli*, *Enterococcus faecalis* and *Staphylococcus epidermidis* allowing for directed antibiotic and antifungal therapies. Despite improvement, the wounds persisted after several weeks of treatment.

Materials/Methods: A case report involving one adolescent patient in the hospital. A literature search was conducted to see if intralesional steroids have been used in CGD.

Results: Faced with recalcitrant cutaneous lesions despite aggressive systemic and topical therapies, we looked to alternative options. Noting that other granulomatous diseases show response with intralesional corticosteroid therapy, we considered this for our patient (1, 2). For example, patients with idiopathic granulomatous cheilitis had a complete response after three monthly injections of intralesional corticosteroids (3). Sarcoidosis patients also improve with intra-granuloma corticosteroid injection (4,5). Our patient received 20 mg triamcinolone acetonide injections two separate occasions, administered in multiple open lesions at eight-week intervals. The cutaneous lesion improvement was gradual and complete resolution of the first open wound was noted fifty-two days from initial steroid injection.

Conclusions: To our knowledge, intralesional glucocorticoid therapy has not previously been used to treat cutaneous disease in CGD patients. We are reporting the first CGD patient with successful lesion resolution following steroid injection as part of therapy. As such, we believe this case is significant and suggests that direct lesion injection with glucocorticoids can add to treatment options for CGD patients with recalcitrant cutaneous disease.