The Importance of Recognizing the Many Facets of Crohn's Disease

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Background

Crohn's Disease is a disease characterized by segmental granulomatous inflammation of the gastrointestinal tract.[1] Crohn's disease frequently involves the integumentary system, and thus it is important to healthcare providers in all fields of medicine to recognize the cutaneous findings associated with Crohn's disease.[1]

Case Report

A 45-year-old Caucasian female with Crohn's disease was referred to our outpatient dermatology group for the management of pyoderma gangrenosum on her legs. Two months prior to initial presentation, her rheumatologist initiated ixekizumab for treatment of presumed "palmoplantar pustular psoriasis and psoriatic arthritis". Although her Crohn's was considered to be in remission, it was previously managed with a total proctocolectomy/ileostomy and biologic therapies including: infliximab, adalimumab and ustekinumab. Additionally, she had a recent rectovaginal fistula repair.

Physical examination revealed ulcers with violaceous borders on her right medial malleolus (Figure 1). Additionally, she had non-purulent ulcers with undermining borders in the suprapubic and right inguinal region (Figure 2). The edge of a suprapubic ulcer was biopsied, which revealed ill-formed granulomas, giant cells, and eosinophils with negative AFB and PAS stains (Figures 3,6). Laboratory results included negative tuberculosis screening. The diagnosis was consistent with a granulomatous dermatitis, favoring metastatic Crohn's disease. Ixekizumab was discontinued. She was started on oral metronidazole and infliximab infusions. Individual lesions were treated with intralesional triamcinolone and betamethasone ointment. During her infliximab infusion, the patient experienced a severe infusion reaction with hypotension, so the decision was made to switch the patient to Certolizumab-pegol. 3 months after switching her TNF inhibitor the patient's lesions had resolved or improved significantly (Figure 4,5).

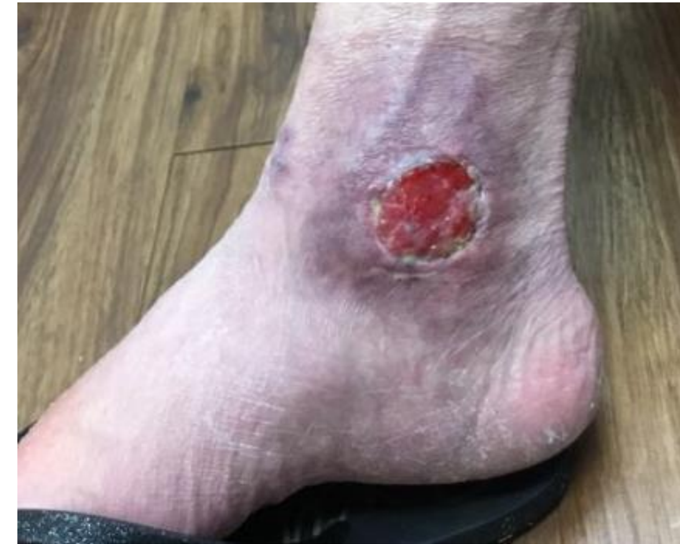

Figure 1. Ulceration of right medial malleolus at initial presentation

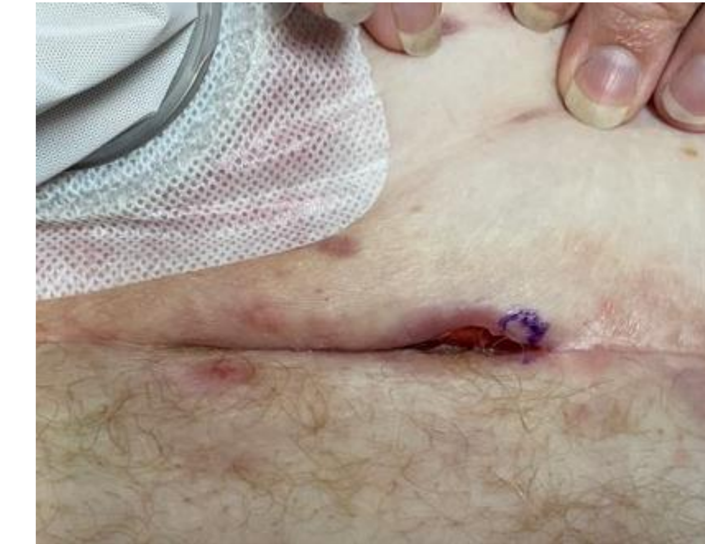

Figure 2. Ulceration arising in previous cesarean section scar

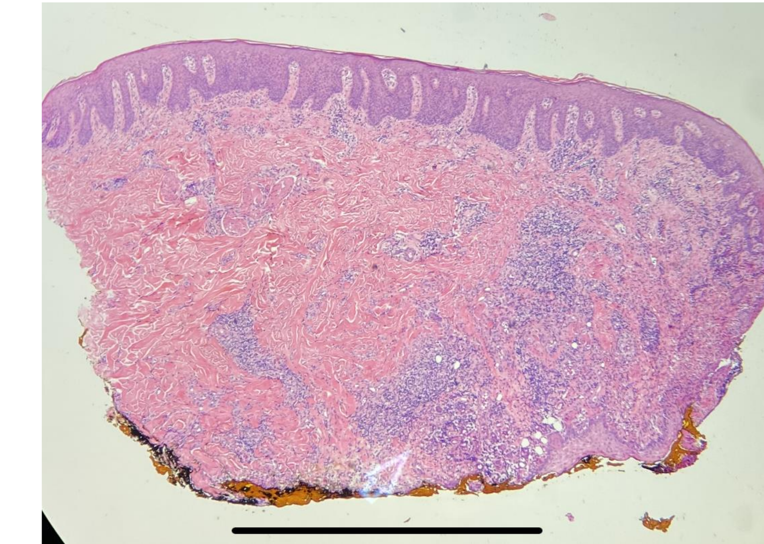

Figure 3. Low power view of punch biopsy with ulceration visible on the right side of the image

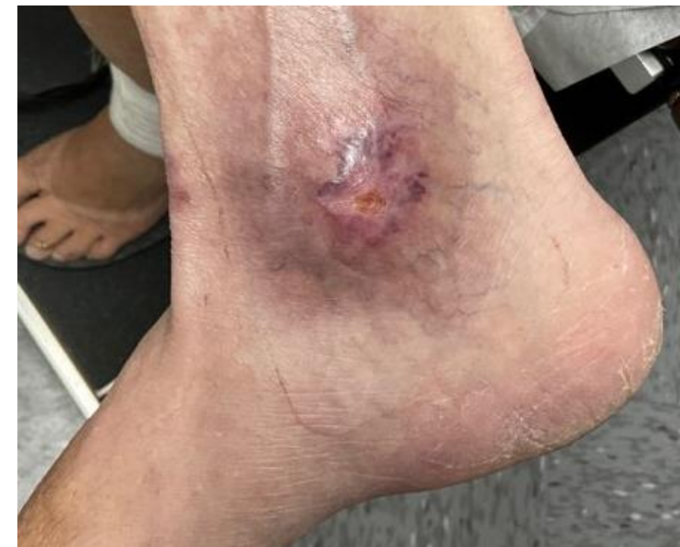

Figure 4. Resolved ulceration of medial malleolus after 3 months

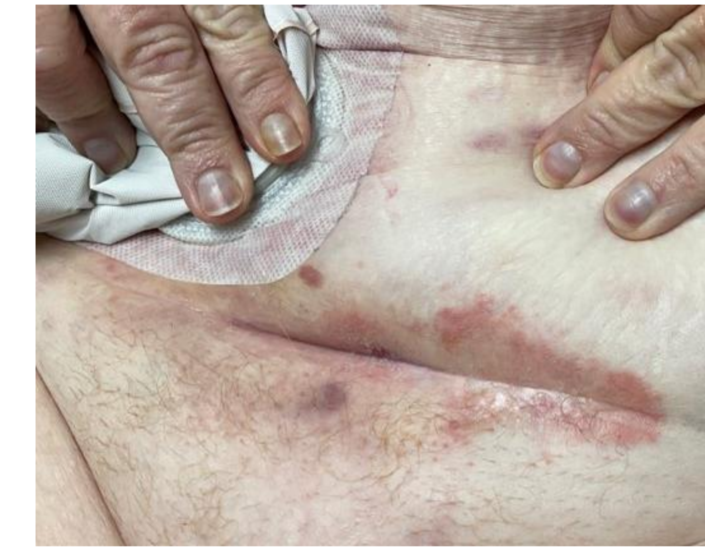

Figure 5. Resolved ulceration within previous cesarean section scar

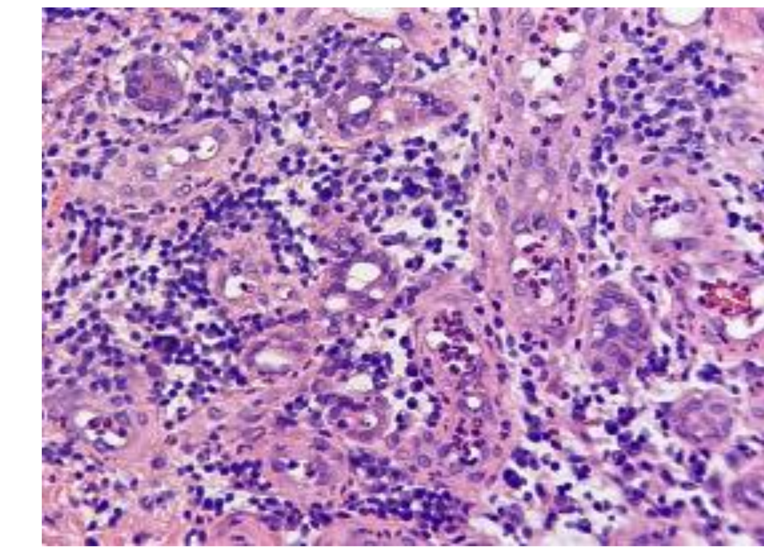

Figure 6. Granulomatous inflammation with giant cells and eosinophils

Discussion/Conclusion

Our patient had active cutaneous manifestations of Crohn's that would have contraindicated therapy with Ixekizumab, an IL-17 inhibitor.[3] She had CD-specific lesions with rectovaginal fistula, cutaneous Crohn's disease, and an associated palmoplantar pustulosis and psoriatic arthritis; the history of pyoderma gangrenosum remains questionable at this time, as cutaneous CD is a clinical mimic.[1,2] Histologically, they can be differentiated based on the pattern of inflammation.[1] A case report similar to ours reported certolizumab as an effective therapy for cutaneous Crohn's disease in their patient.[4] As the mucocutaneous presentations of Crohn's are under recognized in other specialties, these patients may not be provided with appropriate medical management. This case illustrates the importance of close dermatologic surveillance in patients living with Crohn's disease and other seronegative arthropathies.

References

1. Rosenbach, M., Reisenauer, A., White, K., Korcheva, V., & White, C. (2018). Chapter 93: Non-infectious Granulomas. Dermatology (4th ed., pp. 1644–1663). Elsevier.
2. Kurtzman DJ, Jones T, Lian F, Peng LS. Metastatic Crohn's disease: a review and approach to therapy. J Am Acad Dermatol. 2014 Oct;71(4):804-13. doi: 10.1016/j.jaad.2014.04.002. Epub 2014 Jun 2. PMID: 24888520.
3. Ju J, Dai Y, Yang J, Liu C, Fan L, Feng L, Zhao B, Zeng M, Liu Z, Sun X. Crohn's disease exacerbated by IL-17 inhibitors in patients with psoriasis: a case report. BMC Gastroenterol. 2020 Oct 15;20(1):340. doi: 10.1186/s12876-020-01474-x. PMID: 33059618; PMCID: PMC7560304.
4. Kiuru M, Camp B, Adhami K, Jacob V, Magro C, Wildman H. Treatment of metastatic cutaneous Crohn disease with certolizumab. Dermatol Online J. 2015 Nov 18;21(11):13030/qt17z6j2hv. PMID: 26632928.

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