

Ulcerative Wound in a Patient with Ulcerative Colitis

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Question: A 43-year-old male with a history of ulcerative colitis status post subtotal colectomy with end ileostomy presents with fevers and worsening right shin ulcerative wound. He had minor trauma to his right shin leading to erythema, tenderness, and ulceration (Figure 1 A, B, & C). He received two courses of oral antibiotics for presumed cellulitis yet had rapid wound progression. Biopsy from the wound showed dense dermal neutrophilic infiltrate and no growth in bacterial or fungal cultures (Figure 1 D& E). HIV, Hepatitis B, and C serology, antinuclear antibodies, and anti-cytoplasmic antibodies were all negative. What is the most likely diagnosis?

Answer: This is a classic case of ulcerative pyoderma gangrenosum (PG). PG is a rare neutrophilic dermatosis secondary to an aberrant inflammatory process that presents with rapidly progressing painful purulent ulcers, usually after a minor trauma¹. PG is often confused with soft tissue infection leading to delayed diagnosis. However, associated conditions such as inflammatory bowel disease and inflammatory arthritis should raise suspicion for PG¹. A biopsy is needed for diagnosis after ruling out infection since the treatment is with immunosuppressive therapy². Debridement should be avoided since it may worsen symptoms in the phenomenon known as the pathergy effect².

Reference

Maverakis, E., Marzano, A.V., Le, S.T. *et al.* Pyoderma gangrenosum. *Nat Rev Dis Primers* **6**, 81 (2020). <https://doi.org/10.1038/s41572-020-0213-x>

Goldust M, Hagstrom EL, Rathod D, Ortega-Loayza AG. Diagnosis and novel clinical treatment strategies for pyoderma gangrenosum. *Expert Rev Clin Pharmacol.* 2020 Feb;13(2):157-161. doi: 10.1080/17512433.2020.1709825. Epub 2020 Jan 6. PMID: 31875484.

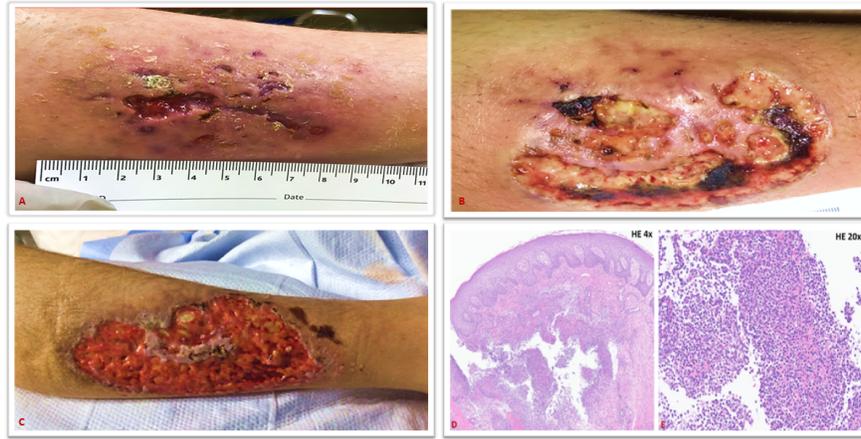


Figure 1 (A) Ten days after minor trauma. Note the fenestrated appearance with ragged, and violaceous borders. (B) and (C) Note progression to a more purulent ulcer with violaceous, edematous, and undermined borders. (D) Diffuse dermal suppurative inflammation (E) Dense neutrophilic infiltrate compatible with pyoderma gangrenosum.