Pyoderma Gangrenosum After Enzymatic Debridement

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An 80-year-old man with a history of IgA monoclonal gammopathy presented with a painful ulcerative lesion on his right knee (Fig. 1) that had developed in response to a lanced pustule. Failure of empiric antibiotics led to a punch biopsy, which showed nonspecific acute and chronic inflammation. A diagnosis of pyoderma gangrenosum was made based on negative tissue cultures, characteristic pain, and a classic clinical appearance. Oral cyclosporine resulted in improvement of the lesion. After discharge, he was lost to follow-up, discontinued the use of cyclosporine, and consulted an outside wound care provider, who initiated a regimen containing topical collagenase for enzymatic debridement. The patient was readmitted with worsening of the lesion (Fig. 2) and hemodynamically significant bleeding. He required blood transfusions but responded well to oral prednisone and avoidance of further mechanical and chemical trauma.

Figure 1 Characteristic lesion of pyoderma gangrenosum. Image of the initial lesion on the patient's right knee.

Figure 2 Response after local trauma. Extension of the initial lesion down the right leg after topical collagenase had been applied.

Pyoderma gangrenosum is a neutrophilic dermatosis that commonly presents as an inflammatory nodule or pustule that enlarges and ulcerates.¹ Mechanical or chemical trauma is known to exacerbate the wound via the mechanism of pathergy.¹ Associated systemic diseases include inflammatory bowel disease, arthritis, and hematologic disorders; monoclonal gammopathies (predominantly IgA) are associated in approximately 10% of cases.¹⁻⁴

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Compliance with Ethical Standards:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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