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Painful skin lesions and bloody diarrhea

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Introduction

Pyoderma gangrenosum (PG) is a rare ulcerative lesion, commonly associated with an underlying systemic disease. The diagnosis of pyoderma gangrenosum can be challenging, and often requires a good history and exclusion of other ulcerative cutaneous disease. We present an impressive case of pyoderma gangrenosum in a young woman with bloody diarrhea.

Case presentation

A 21-year-old woman with a distant history of bloody diarrhea one year prior to presentation, came to our institution with a month history of painful skin lesions on her legs and hands. She reported that these lesions started while working in Southern Africa. She denied any fevers, or chills. She reported persistent bloody diarrhea that started about two months prior to onset of her skin lesions. She denied any abdominal pain, weight loss, nausea or vomiting. She had no history of cutaneous trauma. On examination, she was afebrile. Abdomen was soft, non-tender with normal active bowel sounds. A skin lesion on her lower extremity is shown in **Figure 1**.

A biopsy of the lesion showed ulcerated skin bullous lesions with inflammatory cell infiltrates. Colonoscopy revealed diffuse ulceration with gland distortion and an increase in inflammatory cells. The patient was started on prednisone, at 1 mg/kg, which resolved her bloody diarrhea. She was also started on mesalamine to follow up as an outpatient.

Discussion

Pyoderma gangrenosum (PG) is a rare ulcerating skin lesion that can mimic a wound infection. It is an autoimmune disorder that results in ulceration and necrosis of the skin. Up to 70% of cases with PG are associated with an underlying systemic disease including inflammatory bowel disease, rheumatoid arthritis or hematological malignancies. (1) In patients with IBD, the severity of the disease is not associated with PG but likely indicates a particular phenotype of the disease. (2) Diagnosis is typically made by clinical history and presentation of a rapidly progressive painful ulcer. Histopathology is often non-specific for PG. (3)

Surgical management of PG is controversial as debridement can worsen the inflammatory reaction and exacerbate the skin ulcerations. (4) PG is usually treated with topical steroids or topical calcineurin inhibitors. More extensive disease is usually treated with systemic steroids, immunomodulators such as cyclosporine or newer biologics like infliximab.

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Figure 1. Lesion in lower extremity