BRIEF ARTICLES

Dermatitis Artefacta Resembling Pyoderma Gangrenosum: A Case Report

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ABSTRACT

Dermatitis artefacta (DA) is a self-inflicted skin condition that clinically mimics other dermatologic conditions. The etiology is multifactorial and is linked to underlying psychological conditions or psychosocial stressors with relief from automutilation. Lesions present with variable morphology depending on the type of self-harm and therefore, is a diagnosis of exclusion. We present a case of lesions that initially appeared to be pyoderma gangrenosum (PG) due to a presentation of nonspecific ulcers on the lower extremity and a patient-reported history of inflammatory bowel disease (IBD). The patient, a retired nurse, carried out an exceptionally active role in deceiving the medical team. She fabricated her medical history, including a prior diagnosis of IBD, to help support her assertion that her skin lesions were PG. Skin lesions that do not fit a particular clinical-pathological diagnosis and resist conventional treatments should prompt clinicians to consider a diagnosis of DA. This case highlights the challenge of recognizing DA, especially in medically-knowledgeable patients proficient with navigating the healthcare system. Once other dermatologic conditions are ruled out, it is important to consider DA since early intervention is necessary for good patient outcomes.

INTRODUCTION

A leg ulcer is a physical finding that can result from multiple etiologies; accordingly, determination of the cause is essential for selecting appropriate treatment and need for further evaluation. The most common causes of leg ulcers are venous insufficiency, arterial insufficiency, and neuropathic disease. Less common causes include physical injury, infection, vasculopathy, panniculitis, malignancy, medications, brown-recluse spider envenomation, and pyoderma gangrenosum (PG).[1]

PG is a poorly understood, noninfectious, neutrophilic dermatosis that presents as recurrent skin ulcers, most commonly on the lower extremity.[2] The initial lesion starts as a tender pustule, progressing to a necrotic bulla that ulcerates with purulent drainage.[2] Approximately half of patients that develop PG present with a chronic underlying systemic inflammatory or malignant disease such as ulcerative colitis, rheumatoid arthritis, chronic active hepatitis, Crohn's disease, IgA monoclonal gammopathy, and hematologic malignancies.[2-4] Ulcers can also be due to self-mutilation from an underlying psychological condition known as dermatitis artefacta (DA). This diagnosis may be difficult to elucidate since it masquerades as other more common conditions.

CASE REPORT

A middle-aged female whom is a retired nurse presents with several large ulcers on the lower legs and left arm. These lesions started over four months prior to presentation. She asserts that she had been diagnosed with inflammatory bowel disease by a gastroenterologist, however, this was not corroborated by the medical team. On physical exam, large annular ulcerations were seen over the left arm and the bilateral lower legs. The most prominent lesions were noted on the left lower extremity (Figure 1 and Figure 2). Venous and arterial doppler revealed good blood flow. The patient was admitted to the hospital floor for non-healing ulcers with a clinical suspicion for pyoderma gangrenosum. She was managed by a multidisciplinary team consisting of specialists in rheumatology, dermatology, and internal medicine. Two punch biopsies were performed on the lesions revealing a dense superficial mixed cell infiltrate including neutrophils, histiocytes, lymphocytes, and eosinophils around a significant bed of ulceration. No sign of malignancy on histology was noted. Direct immunofluorescence studies were negative. A gram stain was insignificant and cultures were insignificant, showing only mixed normal skin flora. Specific cultures for fungus and mycobacteria were negative, including cultures for fungal and mycobacterial organisms. Abundant eosinophils noted on histopathology is a feature not typical for PG, a condition defined by an abundance of neutrophils. A self-inflicted skin disorder was then suspected. Accordingly, a sitter was asked to watch the patient around-the-clock. Ten days after initiating the sitter, her skin improved significantly. The patient's son incidentally found a labelled bottle of sodium hydroxide plus several vials of suspicious unlabeled powders in her belongings at the bedside. The medical team was convinced that her skin disease was purely self-inflicted. This case of initially-suspected PG was concluded to be DA.

Figure 1. Ulcers present over the left lower extremity.

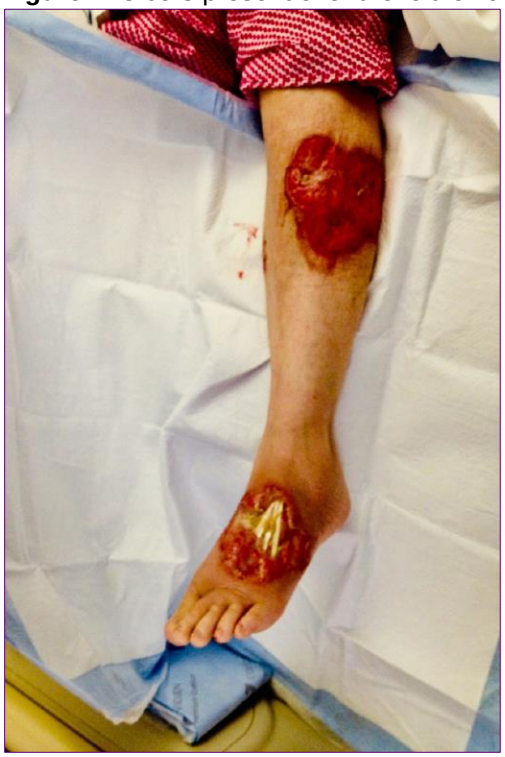
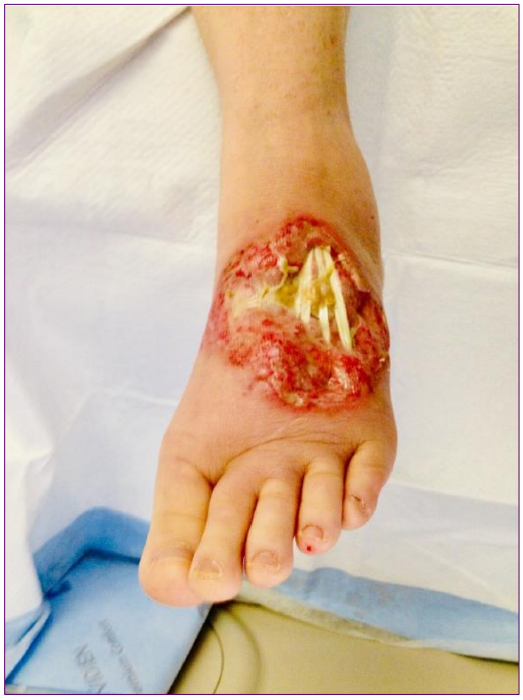


Figure 2. Ulcer on the dorsum of the left foot clearly reveals muscle tendons.



DISCUSSION

PG is a diagnosis of exclusion since the clinical, histopathologic, and laboratory findings are nonspecific.[5] On physical exam, the ulcer of PG will be tender, necrotic, with irregular violaceous borders. A biopsy will demonstrate a neutrophilic infiltrate but be negative for microorganisms. Additional investigations to rule out other causes of ulcers include venous and arterial function studies, ANCA, a coagulation panel including antiphospholipid antibody screening, and serum protein immunoelectrophoresis to test for monoclonal gammopathy. The diagnosis of PG is strengthened by a history of IBD or other systemic conditions.

Dermatitis artefacta, similar to PG, may present with ulcers and it remains a diagnosis of exclusion.[4] In DA, self-inflicted skin lesions result from the patient's attempt to satisfy an internal psychological need, often a need to be cared for. The case herein showcases an exceptionally sophisticated attempt to deceive the medical team. She wounded her skin with harsh chemicals while fabricating an elegant medical rationale for her disease: PG associated with IBD. She apparently researched the clinical presentation of PG prior to her medical attention. Those with a background in medicine, such as this case are often better at concealing the true nature of their disease. Diagnosis of DA is often challenging due to it having a multitude of clinical presentations combined with vague past medical histories that may or may not include a psychological history.[6] Clinicians must consider DA when a dermatosis is atypical or unresponsive to conventional treatments, since a failure to recognize this condition early implies poor patient outcomes. Other clues are lesions that improve with a sitter, a history of multiple hospital admissions and office visits, and prior professional medical training. Importantly, clinicians should consider a referral to an appropriate psychiatric care specialist for adjunct therapy.

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