A Single Cutaneous Ulcer in a Healthy Adolescent

KEYWORDS – Adolescent; Pyoderma Gangrenosum; Leg Ulcer; Skin Ulcer.

CASE REPORT
A 13 year-old-girl presented with a spontaneous ulcer of the left leg. She was a healthy girl with no history of gastrointestinal symptoms, fever or other systemic complains. She was initially evaluated and treated with a one-week course of flucloxacillin. Despite this therapy, the patient maintained a painful ulcer with irregular borders that continued to grow over the following weeks. Physical examination revealed a single ulcer, with approximately 20 mm in the greatest axis, with irregular, erythematous, slight elevated borders, and a fibrinous base, localized on the left leg (Fig. 1A and 1B). Further evaluation with laboratorial studies only revealed leukocytosis with neutrophilia. Serological markers of hepatitis B and C, HIV, syphilis, immunologic study and serum protein electrophoresis did not reveal any alteration. A skin biopsy was performed and the histopathology showed a...
diffuse neutrophilic infiltrate at the base of the ulcer and subjacent dermis. Cultures for bacteria, mycobacteria and fungi from skin lesion were negative.

A diagnosis of pyoderma gangrenosum was proposed and the patient was treated with oral prednisolone with good response (Fig. 2). Cyclosporine was added and allowed a slow tapering of corticosteroid. Five months after the diagnosis, the ulcer has completely healed. No new lesions have appeared after the suspension of the cyclosporine. To date, the case remains idiopathic with no evidence of underlying diseases.

**DIAGNOSIS**

Pyoderma gangrenosum (PG) is a primarily sterile inflammatory neutrophilic dermatosis. It is an uncommon disorder that most commonly develops in young and middle-aged adults. Cases in infants and adolescents account for only 4% of PG. The clinical manifestations of PG are variable, and can be divided into four major subtypes: ulcerative, bullous, pustular and vegetative PG. The most common clinical presentation of pediatric PG is multiple disseminated ulcers. It is always a diagnostic of exclusion. When PG is recognized in a child, evaluation for associated comorbidity is warranted. The most frequent underlying disorder in pediatric PG is Crohn’s disease. Other common underlying etiologies in pediatric PG include ulcerative colitis, hematologic disorders, vasculitis, immune deficiencies, PAPA (pyogenic arthritis, pyoderma and acne) syndrome. Still, idiopathic cases, as the presented clinical report, account for 49% of cases. Corticosteroids with or without steroid-sparing therapy remain the cornerstone of management of pediatric PG. Treatment of the associated disorder is imperative. It is important to maintain patient follow-up in order to exclude the development of systemic disorders, such as IBD, leukemia, or arthritis, that could be associated with pediatric PG.

**REFERENCES**