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LETTER TO THE EDITOR

Comments on: "Pyoderma Gangrenosum following an orthopedic surgical procedure" by E. de Thomasson, and I. Caux, published in *Orthop Traumatol Surg Res* 2010;96:600–602

Following the article by De Thomasson [1], we wish to report a new case of pyoderma gangrenosum (PG) occurring after hip surgery.

An 81-year-old man with a history of unclassifiable myelodysplastic syndrome (MDS), not treated with hematopoietic growth factors, was hospitalized in the orthopedic surgery department for gamma-nail osteosynthesis of a pertrochanteric fracture of the left femur caused by a fall. Progression was marked by the appearance of a moderately painful ulcerated lesion 3 days after the operation, progressively and rapidly spreading in a centrifugal manner, measuring 27 × 17 cm, with a purulent base limited by an active and detaching reddish-purple edge (Fig. 1). The patient's temperature was 38 °C and the CRP was 150 mg/L. On D8, empirical antibiotic therapy was initiated, with no improvement. After 6 days of antibiotic treatment, with suspected sepsis caused by the osteosynthesis material, it was decided to reoperate for surgical cleaning and lavage. Superficial and deep bacteriological samples of the surgical site were negative. The biopsies of the ulcerated cutaneous lesion showed extended pyocytes with abnormal polynuclear cells fistulating at the skin, suggesting a septic process but with no infectious agent, compatible with an abscess. Given the lack of improvement with large-spectrum antibiotic therapy, the diagnosis of PG was raised and corticotherapy initiated at 1 mg/kg per day of prednisone for 15 days with complete healing after 4 weeks.

This is the third case of PG described, after hip surgery (arthroplasty) [1,2] and osteosynthesis (the present patient). The clinical aspect of PG corresponds to the ulcerated form, which is the most classical form, initially described by Brunsting [3]. In a few days, the centrifugal cutaneous ulceration reached several centimeters in size,



Figure 1 Vast cutaneous ulceration surrounded by an inflammatory fold at the surgical site.

surrounded by a reddish-purple inflammatory fold characteristic of PG, which should suggest this diagnosis. The histology is nonspecific. The existence of MDS in this patient and the inefficacy of the antibiotic therapy oriented the diagnosis toward PG. Indeed, in 50–80% of PG cases are most often associated with digestive tract diseases but rarely hemopathies such as monoclonal IgA gammopathy and MDS [4,5]. The short time between PG onset and osteosynthesis challenges the surgery rather than the MDS in our opinion, which may nevertheless have played a supporting role. Corticotherapy was rapidly effective and healing with no sequelae was obtained after 15 days of prednisone at 1 mg/kg per day, whereas in approximately one out of two cases corticotherapy in PG associated with other diseases is continued for several months: a mean 4 months with sometimes addition of an immunosuppressant or immunomodulator treatment [6]. With the frequency of MDS increasing with age (incidence between 70 and 80 cases per 100,000 inhabitants older than 80 years of age) [7] and the high risk of fracture in this elderly population should make the orthopedic surgeon vigilant with any extensive ulcerated lesion of the surgical site, which should not be mistaken for sepsis.

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Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

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