

LETTERS TO THE EDITOR

Tender red subcutaneous nodules in an adult female: a challenging diagnosis

Key words: Endoscopic pancreatitis. Pancreatic panniculitis. Adipocyte necrosis.

Dear Editor,

Pancreatic panniculitis is an uncommon and rare skin complication of systemic fat necrosis associated with pancreatitis *post-ampullectomy*. Besides the rarity of the condition, the clinical history and physical examination for diagnosis is also important.

Case report

A 74-year-old female underwent an endoscopic mucosal resection and ampullectomy of a type 0-IIa (Paris Classification) duodenal lesion that involved the major papilla. The procedure was complicated due to pancreatitis, and two days later the patient presented multiple nodular erythematous and purplish skin lesions (Fig. 1A) in the lower limbs. These were tender and painful on palpation and the largest lesion measured nearly 3 cm in diameter. The patient had no past history of inflammatory or renal disorder, trauma or infection. Hyperuricemia and alpha-1 antitrypsin deficiency were not present. The skin lesions resolved spontaneously after four days with the concomitant improvement of the pancreatitis. Biopsies of the lesions confirmed a diagnosis of pancreatic panniculitis (Fig. 1B).

Discussion

Pancreatic panniculitis is an inflammatory condition of the subcutaneous fat which can develop concomitantly with pancreatic diseases (0.3-3% of all pancreatic diseases) (1). The etiology is unknown but fat necrosis following the release of pancreatic enzymes into the bloodstream has been considered (2). Panniculitis manifests as tender erythematous or violaceous subcutaneous nodules usually located in the lower limbs but can also spread over the

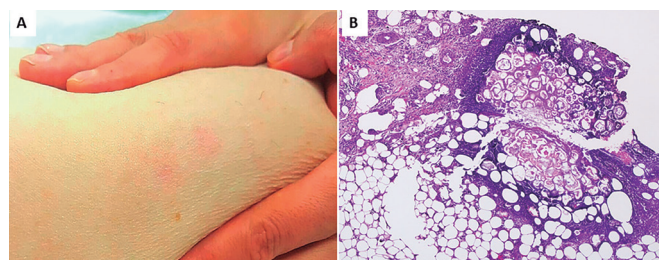


Fig. 1. A. An abdominal physical examination revealed multiple nodular erythematous and purplish skin lesions on the lower limbs, which were tender and painful on palpation; the largest lesion measured nearly 3 cm in diameter. B. Histological examination of skin lesion biopsies showed a predominant lobular panniculitis with enzymatic degeneration of adipocytes and peripheral neutrophilic inflammation. Discrete septal panniculitis was also observed (H&E, 40x).

trunk and upper limbs. These lesions may ulcerate and can become infected (3). The skin manifestations are independent of the severity of the pancreatitis and can occur at any time during its clinical course (4). The diagnosis is based on the clinical history and physical examination, and skin biopsies confirm the diagnosis (5). The treatment is supportive and skin nodules usually disappear following the resolution of the pancreatic inflammation (1).

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References

- Dahl PR, Su WP, Cullimore KC, et al. Pancreatic panniculitis. *J Am Acad Dermatol* 1995;33:413-7. DOI: 10.1016/0190-9622(95)91385-8
- García-Romero D, Vanaclocha F. Pancreatic panniculitis. *Dermatol Clin* 2008;26:465-70. DOI: 10.1016/j.det.2008.05.009
- Tran KT, Hughes S, Cockerell CJ, et al. Tender erythematous plaques on the legs. Pancreatic panniculitis (PP). *Clin Exp Dermatol* 2010;35:e65-6. DOI: 10.1111/j.1365-2230.2009.03457.x

4. Makhoul E, Yarbeck C, Urbain D, et al. Pancreatic panniculitis: a rare complication of pancreatitis secondary to ERCP. *Arab J Gastroenterol* 2014;15(1):38-9. DOI: 10.1016/j.ajg.2013.11.005
5. Tran KT, Hughes S, Cockerell CJ, et al. Tender erythematous plaques on the legs. Pancreatic panniculitis (PP). *Clin Exp Dermatol* 2010;35:e65-6. DOI: 10.1111/j.1365-2230.2009.03457.x