Case report



Lupus Pancreatitis: A Rarely Revealing Condition of Systemic Lupus Erythematosus about a Case

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Abstract

Pancreatitis as an initial manifestation of systemic lupus erythematosus is rare. one case is reported of young female patients who presented with fever, abdominal pain, vomiting and elevated levels of pancreatic enzymes. They were diagnosed with acute severe pancreatitis associated with systemic lupus erythematosus. There are a few reports in the literature about this association, but the pathogenesis and treatment are still controversial.

Keywords: systemic lupus erythematosus, acute pancreatitis

Introduction

The occurrence of acute pancreatitis in systemic lupus erythematosus (SLE) is known but rare ^[1], and exceptionally revealing. Its pathogenesis is multifactorial, it is extremely difficult to distinguish between vasculitis, thrombotic phenomena in the context of an antiphospholipid syndrome, or iatrogenic or intercurrent complications ^[2,3,4]. We report the case of a patient in whom acute pancreatitis revealed her systemic disease.

Patient and observation

Patient KA, 31 years old, was hospitalized for pancreatitis retained in front of epigastric pain in the type of cramps with dorsal irradiation relieved by the anteflexed position associated with early postprandial vomiting, an increase in lipaemia to 4.5 times normal with an aspect of Balthazar's stage C acute pancreatitis on abdominal CT scan. Severity assessment found moderate acute pancreatitis with a SIRS of 2. The etiological assessment had not objectified any notion of alcoholism or taking a specific medication during the interrogation, a biliary origin had been ruled out in front of a normal liver assessment with no lithiasis of the bile ducts on the ultrasound, the calcemia, the lipid assessment are normal, he also noted a history of three successive early miscarriages, inflammatory polyarthralgia affecting the large, medium and small joints and photosensitivity. The lupus origin of the pancreatitis was retained for the positive immunology: anti-nuclear antibodies and the anti-DNA anti-body were positive, with autoimmune hemolytic anemia, and an inflammatory syndrome and the evolution of this push was favorable under corticosteroid therapy.



Figure 1: Abdominal scan shows an aspect of acute lupus pancreatitis stage C of Balthazar

Discussion

Systemic lupus erythematosus (LEAD) is an autoimmune disease that can affect many organs including the pancreas. The first description of acute pancreatitis in lupus dates back to 1939^[5], Only ten cases of pancreatitis revealing lupus disease have been reported in the literature ^[6,7,8].

The mechanisms involved in the origin of SLE pancreatitis are unclear. SLE pancreatitis can result from vasculitis, microthrombi, pancreatic autoantibody, drug side effects, intimal thickening, and viral infection. Most lupus pancreatitis occurs in patients with longstanding SLE who have multiorgan involvement and are already on steroid, diuretic, or immunosuppressive therapy, all of which have been implicated in the etiology of pancreatitis. Since the initial description of SLE pancreatitis, whether steroids or SLE are the primary cause has been controversial ^[9,10]. The particularity of our observation is that pancreatitis is an attack revealing lupus and the patient does not take any treatment which is proof of the role of lupus.

During lupus pancreatic involvement can manifest in any way, from mild self-limiting disease to fulminant disease, besides the clinically evident cases of acute pancreatitis, there have also been cases of what is called subclinical pancreatitis in which there is an elevation of pancreatic enzymes without clinical symptoms, it seems that the incidence of subclinical pancreatitis is much higher than clinical pancreatitis A study found hyperamylasemia in 30.5 % of patients with asymptomatic SLE, suggesting that subclinical pancreatic damage may occur frequently in SLE ^[11].

Conclusion

The mechanisms of occurrence of acute pancreatitis are multiple and probably intertwined.

The majority of cases of lupus pancreatitis have been described in subjects with multiple visceral involvements. It is important to recognize the etiology of pancreatitis during SLE (medication, lupus, lithiasis, etc.) because therapeutic management depends on it.

References

- [1] Godeau P. When to think of a systemic disease in the intensive care unit? Resuscitation 2005;14:563-8.
- [2] D'Cruz DP, Khamashta MA, Hughes GR. Systemic lupus erythematosus. Lancet 2007; 369: 587–596.
- [3] Breuer GS, Baer A, Dahan D, Nesher G. Lupus-associated pancreatitis. Autoimmune Rev 2006; 5: 314–318.
- [4] Derk CT, DeHoratius RJ. Systemic lupus erythematosus and acute pancreatitis: a case series. Clin Rheumatol 2004; 23: 147–151.
- [5] Reifenstein EC, Reifenstein Jr. EC, Reifenstein GH. A variable symptom complex of undetermined etiology with fatal termination. Arch Intern Med 1939;63:553-4. Fig. 2.

Mediastinal window. Axial slice after injection of contrast product: abundant pleural, mediastinal and pericardial effusion. S. Agoumi et al. / The Journal of Internal Medicine 27 (2006) 799–802 801

- [6] Hazel V, Duncan MD, Gloria Achara MD. A rare initial manifestation of systemic lupus erythematosus acute pancreatitis: case report and review of the literature. J Am Board Fam Prac 2003;16:334-8.
- [7] Feng W, Nian-Song W, Bing-Hui Z, Ling-Quan T. Acute pancreatitis as an initial symptom of systemic lupus erythematosus: a case report and review of the literature. World J Gastoenterol 2005;11:4766-8
- [8] Duncan HV, Achara G. A rare initial manifestation of systemic lupus erythematosus-acute pancreatitis and review of the literature. J Am Board Fam Prac 2003;16:334-8.
- [9] Lê Thi Huong D, Papo T, Laraki R, Wechsler B, Blétry O, Chapelon C, Cabane J, Godeau P. Pancreatitis in systemic lupus erythematosus. Review of the literature about 5 cases. Internal Rev Med. 1994; 15: 89–94. [PubMed] [Google Scholar]
- [10] Ikura Y, Matsuo T, Ogami M, Yamazaki S, Okamura M, Yoshikawa J, Ueda M. Cytomegalovirus-associated pancreatitis in a patient with systemic lupus erythematosus. J Rheumatol. 2000; 27:2715–2717. [PubMed] [Google Scholar]
- [11] Ranson JH. Standard diagnosis for acute pancreatitis. World J Surg 1997;21:136 – 42.

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