Acute pancreatitis as atypical manifestation of Epstein-Barr virus infection

Key words: Epstein-Barr virus. Pancreatitis.

Dear Editor,

A 15-year-old male, no relevant medical history, was admitted after a 5 day episode of epigastric pain together with referred pain in the back. Denial of toxic habits. Having received antibiotic treatment for tonsillitis days before his admission.

A physical examination revealed the presence of a right occipital adenopathy and bilateral inguinal lymphadenopathy, as well as erythematous pharynx and abdominal pain on mesogastric palpation without peritoneal irritation. Analytical data highlighted a lymphomonocytosis with 7,710 leukocytes/mm$^3$ (43.7 % lymphocytes, 13.9 % monocytes); erythrocyte sedimentation rate, 43 mm/h; CRP, 16.4 mg/dL, and amylase, 1,251 IU/L (range 28-100 IU/L). Requested serology was positive for the presence of heterophile antibodies to Epstein-Barr virus (EBV). The peripheral blood smear detected lymphomonocytosis, with a predominance of activated mature cells suggesting a viral infection.

An abdominal ultrasound eliminated the possibility of pancreatitis caused by gallstones. Abdominal CT scan showed a globular pancreas, mild hepatosplenomegaly, moderate ascites and significant left paraaortic lymphadenopathy, all of which suggested a probable viral process (type EBV infection).

Discussion

EBV is one of the most prevalent viruses, infecting more than 90 % of the population. While most EBV infections in children are asymptomatic, infections in adolescents and adults often cause symptomatic infectious mononucleosis. Infrequent complications include hemolytic or aplastic anemia, thrombocytopenia, myocardiitis, hepatitis, genital ulcers, splenic rupture, rash, neurological complications and several types of tumors (1).

The most common causes of acute pancreatitis in an immunocompetent patient are cholelithiasis and alcoholism, 12 % of which being classified as idiopathic cases. The viral etiology has demonstrated an incidence of 2.2 % in children and 3 % in adults (2).

The agents most commonly implicated in acute pancreatitis due to infection are viruses, especially mumps, Coxsackie type B, hepatitis B and cytomegalovirus (3). It is likely that the true incidence of acute infectious pancreatitis is underestimated as these infections are usually mild or subclinical.

The gastrointestinal tract is one of the most commonly affected systems in EBV infection. Nausea, vomiting, anorexia and abdominal pain being common symptoms, probably related to some degree of hepatitis, hepatomegaly, splenomegaly, and rarely pancreatitis (4).

The diagnosis of EBV pancreatitis is mainly based on serological findings (heterophile antibody test and EBV specific antibodies), clinical manifestations, imaging tests, and finally exclusion of other causes of pancreatitis (5,6).

EBV pancreatitis is extremely rare. Proof of this is the fact that there are a total of only nine cases of EBV pancreatitis in medical literature (7) and one recently published case of pancreatitis due to EBV infection in our area (8).

We conclude that, while pancreatitis caused by viruses, including EBV is rare, this etiology should always be considered after excluding the common causes of acute pancreatitis.

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References