Letters to the Editor

Hemoperitoneum after gallbladder perforation associated with hemodialysis

Key words: Haemoperitoneum. Hemodialysis. Gallbladder perforation.

Dear Editor,

Hemoperitoneum after spontaneous perforation of the gallbladder is an extremely rare finding. Garamendi et al. find less than 50 cases published since 1858 (2). It is believed that the pathogenesis of gallbladder perforation is related with the impaction of a stone in the cystic duct causing inflammation of the gallbladder, infection and necrosis with subsequent perforation. This event can be accompanied with or without hemoperitoneum. On the other hand, hemodialysis patients usually have abdominal complications, particularly complications at the hepatobiliary tree: cholelithiasis, acalculous cholecystitis and lithiasis, and in some cases hemoperitoneum secondary to perforation of the gallbladder. Gold standard imaging test is CT, but in hemodynamically unstable patients, performing an abdominal ultrasound may reveal the presence of hemoperitoneum and therefore the need for urgent surgical treatment although not always it is possible to locate the leak of contrast (1).

We report a case of a 57 year-old man with personal history of hypertension, dyslipidemia, chronic renal failure secondary to IgA mesangial glomerulonephritis. Because of this he was submitted to renal transplantation 30 years before. Nevertheless, he suffered chronic graft dysfunction that recently led to graft removing and

hemodialysis. After this procedure, he suffered a perforation of a duodenal ulcer which needs a vagotomy and pyloroplasty. He came to the emergency room because of diffuse abdominal pain and tendency to hypotension. On palpation, he presented right upper quadrant peritonitis and blood tests showed severe anemia (hematocrit, 23%; haemoglobin, 7.7 g/ dl) with mild leukocytosis and shift to the left. A computer tomography scan showed an intravenous contrast leakage from the gallbladder into the peritoneal cavity and abundant amount of free fluid consistent with hemoperitoneum (Fig 1). During the surgery, we found a very large hemoperitoneum secondary to gallbladder perforation with clear signs of cholecystitis. A cholecystectomy was performed.

The perforation of the gallbladder is a relatively common complication in acute cholecystitis. Although it is rarely accompanied by hemoperitoneum, it is known that in hemodialysis patients the risk of bleeding is increased, probably due to the use of anticoagulants as well as to the clotting disorders inherent to renal failure.

Fig. 1. Black arrow: Note the contrast leakage at the level of the gallbladder. White arrow: Abundant amount of free fluid in the abdominal cavity associated with hemoperitoneum.

Abdominal complications, primarily associated with women and gynecological pathology, require surgical treatment only in 20% of cases (3,4). However, currently, the only treatment of gallbladder perforation with or without hemoperitoneum is cholecystectomy.

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