

CASE NOTE

Hemocholecyst associated with antithrombotic therapy

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CASE REPORT

A 74-year-old man (weight 85 kg, height 1.72 m) was admitted at the emergency department and referred to the surgical department owing to acute abdominal pain localized in the right upper and lower quadrants. Under a physician's supervision, the patient had been taking oral anticoagulants (1¼ capsules [50 mg] of warfarin sodium 5 days a week followed by 1½ capsules the next 2 days) continuously for chronic atrial fibrillation. His liver enzymes were elevated (aspartate aminotransferase 8.57 µkat/L, alanine aminotransferase 2.84 µkat/L) as were serum bilirubin (27.4 µmol/L) and amylase (45.09 µkat/L). C-reactive protein was normal; prothrombin time, international normalized ratio and partial thromboplastin time were 8%, 5.61 and 51 s (range 23–37), respectively.

An ultrasound revealed wide but mild enlargement of the gallbladder walls without stones in the lumen and no enlargement of the biliary (intra- and extrahepatic) ducts or hepatic or pancreatic focal lesions. We began conservative therapy. An ultrasound obtained 2 days later showed evidence of an increased thickness of the gallbladder walls (that appeared ipoechogetic), no stones and a little mass close to the hepatic confluence (17 mm diameter) that seemed to be a reactive lymph node. Magnetic resonance imaging (MRI) of the biliary tract revealed regular intrahepatic ducts and a narrowed hepatic common bile duct 2 cm in length (Fig. 1). The lower tract appeared normal without stones. The gallbladder presented wide double borders (cholecystitis-like) with resonance aspect enhanced by hemorrhagic or essudative component. There was a fluid collection all around the gallbladder and the liver.

One day later, after achievement of normal coagulative parameters, the patient underwent surgery. At laparotomy, plenty of blood was present in the upper abdominal cavity, mostly in the subphrenic and infrahepatic spaces corresponding with the MRI findings). The gallbladder appeared bloody owing to hematic infarction of the walls, and the gastrohepatic ligament had the same appearance (Fig. 2). After insertion of a trocar inside the lumen (with evidence and evacuation of some blood and clots), we performed an anterograde cholecystectomy. It was not possible to insert a biliary drain into the biliary main duct, which was not easily recognized. We obtained a biopsy specimen from the liver to better define the cause of the macroscopical aspect (almost cirrhotic macropatterns) of the organ. During the next 2 postoperative days, the patient experienced some blood loss in the abdominal drain tube but no transfusion was required; we noted haematic stools (melenas), and serum bilirubin gradually decreased from 205 to 25 µmol/L during the following 5 days. The patient was then sent home.

The pathologist studied the biopsy specimen and described it as a hemorrhagic-necrotic gallbladder. Biopsy of the liver revealed septal fibrosis but not cirrhosis.



Fig. 1. Cholangio-magnetic resonance image revealing a strong narrowing of the upper third of the biliary tract.

DISCUSSION

Stroke and systemic thromboembolic events are the most common and well known serious complications of atrial fibrillation. Antithrombotic therapy with warfarin unequivocally decreases the risk of stroke and is now strongly recommended for patients with atrial fibrillation and risk factors for stroke;¹ however, spontaneous bleeding can occur.²⁻³ Annual rates for major bleeding in patients with atrial fibrillation are between 0.4% and 2.6% in the AFFIRM study involving more than 4000 patients.⁴⁻⁵ The rates of minor bleeding was as high as 15.4% per year. Major bleeding included central nervous system (intraparenchymal, subdural, subarachnoid) and non-central nervous system hemorrhage. Minor bleeding included hematuria, gastrointestinal bleeding and epistaxis.

Patients with major bleeding episodes in the AFFIRM study commonly had international normalized ratio values above the desired range of 2–3. Unstable values are strong predictors of complications, and major and minor bleedings hemocholecyst is quite rare. Only 3 cases are reported in literature. Hemocholecyst is a rare complication of anticoagulant therapy in patients with chronic atrial fibrillation. It may present as a clinical picture of acute cholecystitis with or without stones (such as in our patient's case). Preoperative examinations should include ultrasonography

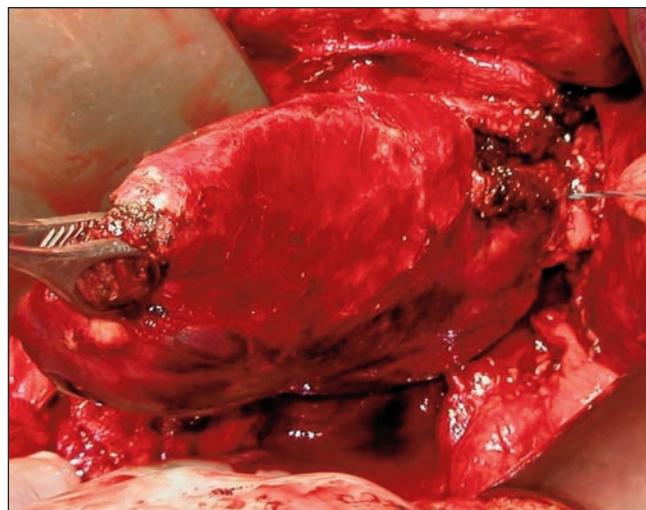


Fig. 2. Hemorrhagic appearance of the gallbladder.

and MRI or technetium scanning to assess the state of the gallbladder walls, the biliary tract and the abdominal cavity. Radiology findings, as in our patient's case, may reveal the hematic nature of the possible fluid collection. In case of hemobilia, a biliary drain should be placed to remove clots and avoid possible jaundice, making subsequent procedures easier (endoscopic flushing or stenting via endoscopic retrograde cholangiopancreatography for instance); in our patient's case it was not possible but the clinical course was likewise favourable.

Competing interests: None declared.

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