



Unique journey of a fallen gall stone leading to gastrointestinal, biliary and intraperitoneal haemorrhage: The first case in the literature

To the Editor,

Hemobilia is an infrequent cause of upper gastrointestinal (GI) bleeding and rarely occurs due to gallstones sometimes it is difficult to define the underlying cause of haemobilia (1-5). The most classic presentation of hemobilia is at triad of right upper quadrant pain, obstructive jaundice and melena.

Here, we report the case of gastrointestinal haemorrhage because of the erosion of the gastroduodenal artery that was caused by a fallen gallstone, which was trapped in the neck of the gallbladder prior to its destructive effect to gallbladder and duodenum walls, which were the unusual features of this case. The trapped gallstone can be exteriorised via three anatomical routes: (1) in the form of haemobilia via the common bile duct, (2) in the form of gastrointestinal haemorrhage via a cholecystoduodenal fistula and (3) intraperitoneal bleeding entrapped within a conglomerate of neighbouring organs around the fistula (3).

A 55-year-old male patient was admitted to the emergency clinic with complaints of weakness, dizziness and rectal bleeding. The general condition of the patient did not improve despite performing multiple blood transfusions, Computed tomography showed a large haematoma in the inferior portion of the liver (Figure 1).

The patient was operated immediately. Gastroduodenotomy was performed and no active bleeding ulcer was detected. However, intraluminal blood deposits were observed from the second part of the duodenum. Blood was detected in all the intestines, and the duodenal mucosa was eroded without active bleeding vessels. The second part of the duodenum, gallbladder and liver were severely attached to each other resulting in

the formation of a conglomerate of these organs and giving it an appearance of a fistula.

The duodenum was dissected from the liver, and a 300-400 cc haematoma was spontaneously drained from duodenum wall. The source of bleeding was the erosion of the gastroduodenal artery (Figure 2). After ligation of the bleeding artery, an intraperitoneally fallen gallstone (size, 3 cm) was observed in the centre of the bleeding zone (Figure 3). The gallbladder was perforated. The fallen gallstone, which was attached to the duodenum wall, was found to be responsible for heavy bleeding from the gastroduodenal artery. Cholecystectomy was performed, and the ruptured duodenum was repaired.

In conclusion, haemobilia is a rare cause of upper GI bleeding. Gallstones are an extremely unusual cause of haemobilia. However, in the present case, a gallstone resulted in the puncture and erosion of the walls of the gallbladder, duodenum and gastroduodenal artery. To the best of our knowledge, this is the first case of haemobilia due to a fallen gallstone, with its unique presentation.

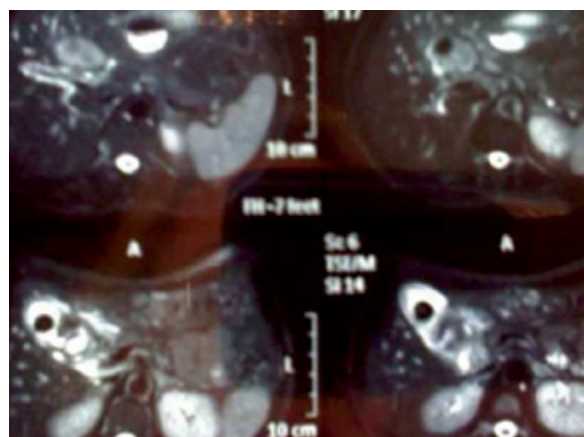


Figure 1. Large haematoma in the inferior side of the liver.

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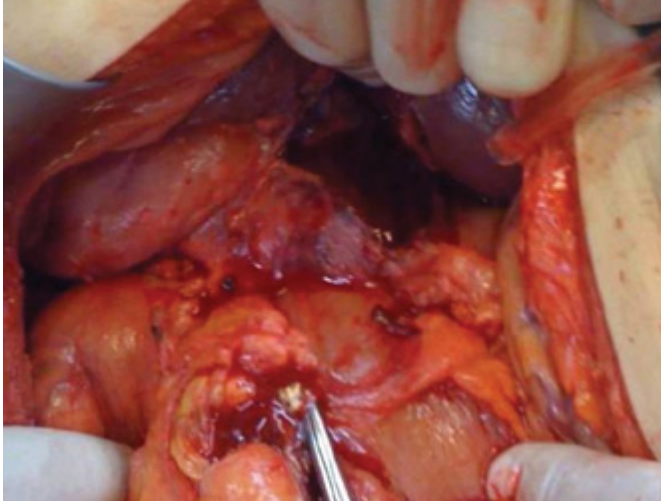


Figure 2. Erosion of the gastroduodenal artery.

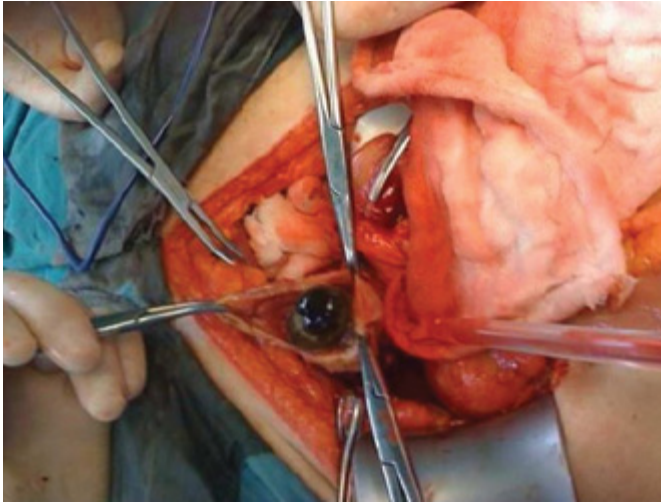


Figure 3. The fallen gallstone.

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Informed Consent: Written informed consent was obtained from patient who participated in this case.

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