

PICTURES IN DIGESTIVE PATHOLOGY

A rare presentation of gallstones: Bouveret's syndrome, a case report

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CASE REPORT

An 84-year-old female consulted for epigastric pain. His personal history included hypertension and cholelithiasis with a previous admission for acute cholecystitis treated medically a year before. Besides pain, she reported solid food intolerance, tolerating fluids well. Physical examination showed only generalized abdominal distention and bloating.

Abdominal plain film revealed calcifications projected on the right upper quadrant in relation to already known cholelithiasis and aerobilia (Fig. 1). The patient was admitted to hospital to complete the study. A gastroscopy was performed where a retention stomach and impaction of a large gallstone, suggestive of a Bouveret's syndrome, were

observed (Fig. 2). Endoscopic removal and fragmentation of the gallstone were impossible, so an abdominopelvic CT scan was performed to determine the stone location (Fig. 3).

In accordance with these findings, the decision was made to operate by open surgery. A large gallstone impacted in the second duodenal portion, which caused a pressure ulcer, with fibrotic adhesions to the gallbladder, was observed. A longitudinal gastrostomy of about 6 cm was made in the gastric body for manual removal of the impacted gallstone (Fig. 4). After the procedure, the patient progressed well, being discharged 7 days later, to be followed up in the outpatients department.

DISCUSSION

Bouveret's syndrome is a rare form of gallstone ileus caused by the passage and impaction of a large gallstone through a cholecysto-duodenal fistula in the duodenum, resulting in gastric outlet obstruction. It was first described in 1896 by Léon Bouveret (Lyon, France). Gallstone ileus is responsible for 1-4% of all cases with small bowel obstruction and the location of these in the duodenum

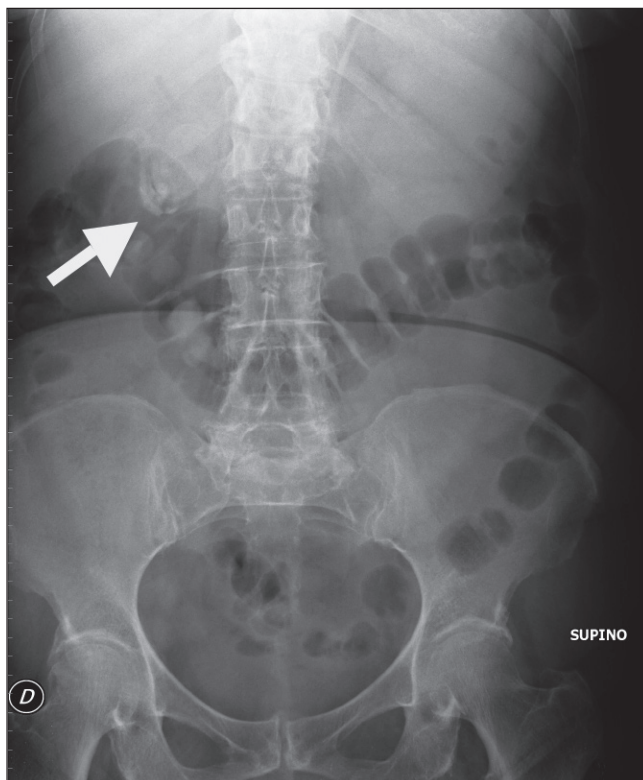


Fig. 1. Aerobilia and stones in the right upper quadrant.

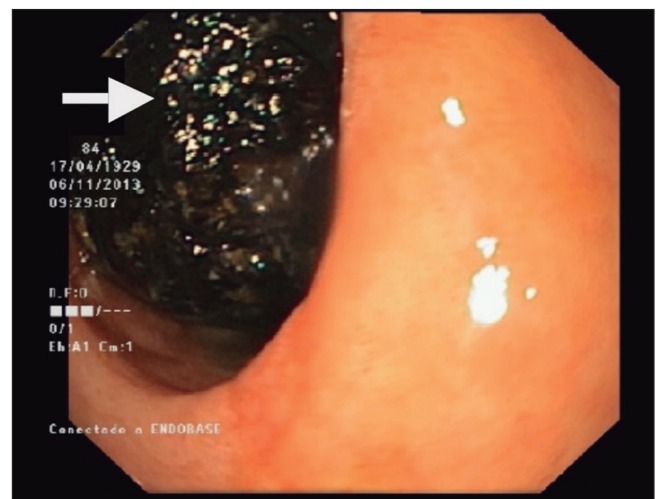


Fig. 2. In the postpyloric region a solid blackish mass obstructing the light completely, suggestive of an impacted gallstone, was seen.

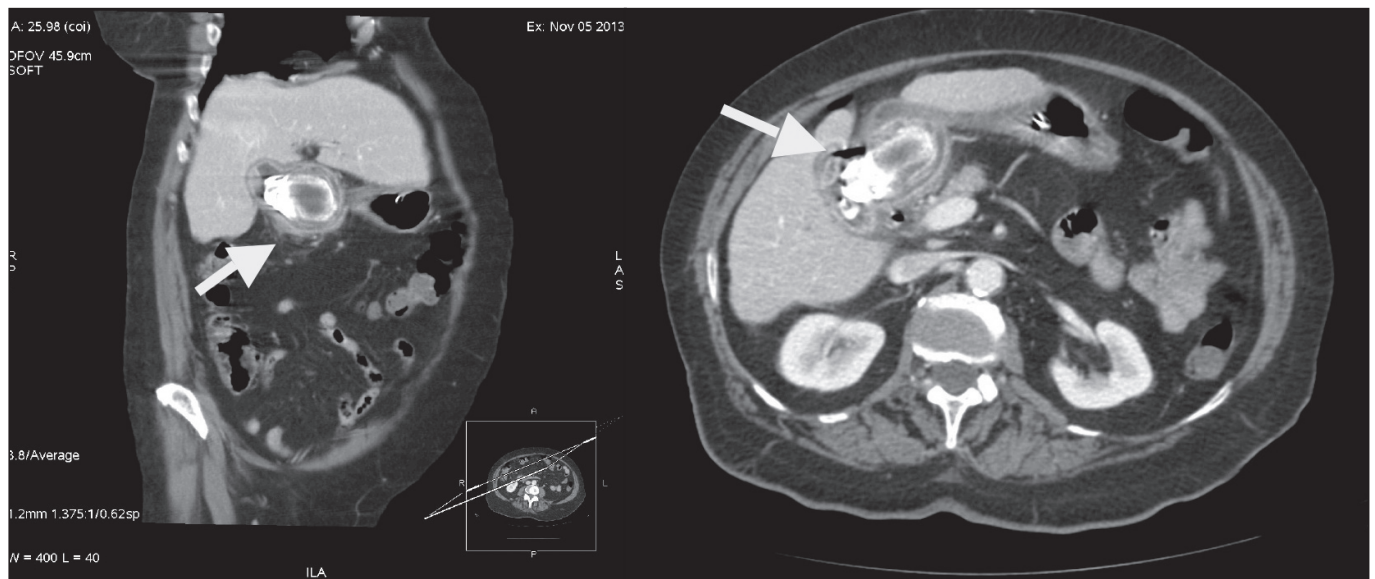


Fig. 3. A large gallstone of approximately 50 x 40 x 30 mm is seen in the first and second duodenal portion adjacent to a contracted gallbladder with aerobilia.



Fig. 4. Gallstone of almost 8 cm in length removed by gastrotomy.

occurs only in 1-3% of cases (1,2). It usually occurs in elderly women, with an average age of 70-75 years and is generally due to a large gallstone (single stone in > 90%) within the pyloric channel or duodenum (3).

The clinical symptoms are nonspecific; the most common symptoms are described as a triad of epigastric pain, nausea and vomiting (3).

Clinical suspicion is essential for diagnosis. The abdominal plain film is diagnostic in only 21% of cases (Rigler triad: small bowel obstruction, pneumobilia, and an ectopic gallstone). Ultrasound is useful to exclude accompanying cholecystitis. CT scan is the diagnostic method in 60% of cases, which can be complemented by a cholangio-RM, because 15-25% of stones are isodense (1,4). The gallstone is endoscopically visible in only 70% of cases, probably because the mucosa covers the embedded stone. In 20-40% of cases the final diagnosis is made during surgery.

Various endoscopic or percutaneous methods have been described for treatment (mechanical, laser, intra/extracor-

poreal electrohydraulic lithotripsy, etc.) (5-7). Despite these options, surgery remains the first treatment option and 91% of patients will need surgery during the disease. Historically, surgery has been reduced to an enterolithotomy or stone extraction by gastrotomy. Cholecystectomy and simultaneous fistula repair is another option, but it is reserved for patients with low surgical risk, when the anatomy is not hostile, and for patients with concomitant acute cholecystitis or gallbladder empyema (3). Due to the age and comorbidity of patients, Bouveret's syndrome has a morbidity of 60% and a mortality of 12-30% (3).

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