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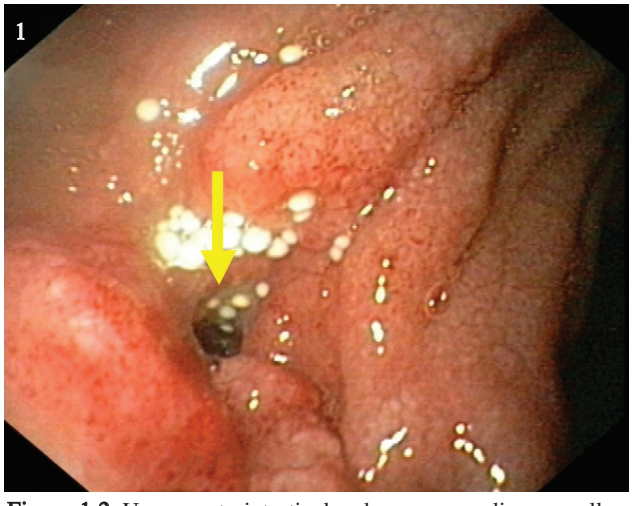
Duodenal perforation due to a gallstone in small intestinal gallstone ileus: "Bouveret's syndrome"

Safra taşına bağlı ince barsak tıkanması ve duodenal perforasyon: "Bouveret sendromu"

To the Editor,

Duodenal obstruction due to a gallstone is an unusual complication of cholelithiasis. The condition is named after the French physician Léon Bouveret, who documented a case of a gallstone leading to an obstruction of the gastric outlet in 1896 (1).

A 78-year-old man with multiple comorbidities was admitted to our hospital with constant upper abdominal pain of 24-hour duration and episodic vomiting. Upper gastrointestinal endoscopy was performed revealing a small perforation of the du-



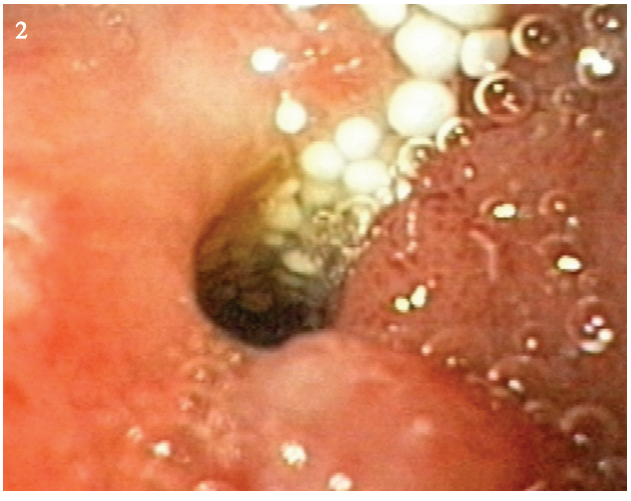


Figure 1-2. Upper gastrointestinal endoscopy revealing a small perforation of the duodenal bulb approximately 0.5 cm in diameter (Fig. 2: magnification).

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odenal bulb (Figures 1, 2). Laboratory tests on admission revealed an increase in bilirubin (2.38 mg/dl).

Abdominal X-ray demonstrated dilatated bowel loops and pneumobilia. On ultrasound, small intestinal ileus and gastric retention were suspected, whereas the extrahepatic bile ducts and the gallbladder were not detectable. Computed tomography of the abdomen showed small amounts of free air adjacent to the stone-free gallbladder, highly suggestive of gallstone perforation. Furthermore, a large concrement was demonstrated in the ascending colon (Figure 3), thus supporting the diagnosis of a temporary duodenal obstruction due to a gallstone. Subsequently, duodenoscopy was performed; after application of contrast media, only a small recess in the region of the duodenal perforation was shown as the remains of a transitory cholecystenteric fistula, probably between the gallbladder and the duodenum.

Since the patient was completely free of symptoms and bilirubin level was normal 6 hours after admission, no surgical procedure was started. A follow-up abdominal X-ray revealed no ileus, indicating a spontaneous removal of the colonic gallstone. A repeat upper endoscopy showed no pathological changes in the duodenum. Cholecystectomy was refused by the patient. However, there has been no relapse of symptomatic gallstone disease in the 6 months of follow-up.

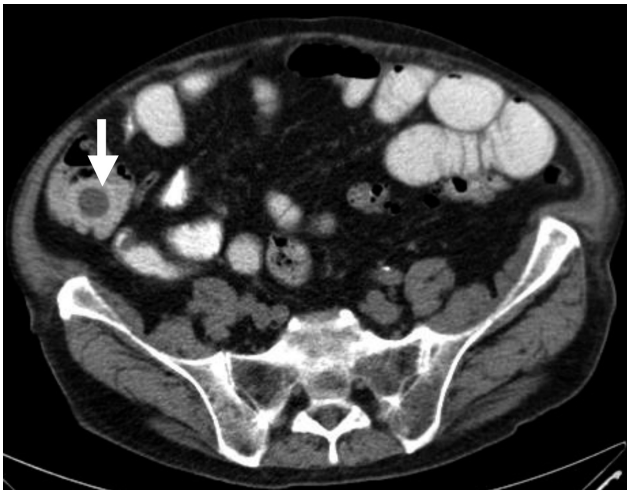

Figure 3. Abdominal computed tomography showing large ectopic concrement approximately 30 mm in diameter in the ascending colon (Siemens Emotion Duo).

The morbidity and mortality rate of gallstone ileus remain quite high, partly because of delayed diagnosis. Proper endoscopic interpretation of duodenal perforations can be a prerequisite to early detection of Bouveret's syndrome. However, a spontaneous recovery without surgical treatment is possible. A conservative therapy can be indicated, especially in elderly patients with a rapid improvement in clinical symptoms (2).

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