

PICTURES IN DIGESTIVE PATHOLOGY

## Bouveret's syndrome: Evaluation with multidetector CT

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### CASE REPORT

We report the case of an 88-year-old woman with personal history of biliary pancreatitis twenty years ago. She presented two months history of recurrent alimentary vomiting and epigastralgia after eating.

An abdominal 64 slice multidetector computed tomography (MDCT) was performed. Contrast-enhanced MDCT showed gastric outlet obstruction due to impaction of a large gallstone in the first portion of the duodenum, cholecysto-duodenal fistula and pneumobilia (Fig. 1 A and B). With all those findings, Bouveret's syndrome was diagnosed, and this diagnose was later confirmed by surgery.

There are no other conditions in the differential diagnosis since these findings are pathognomonic.

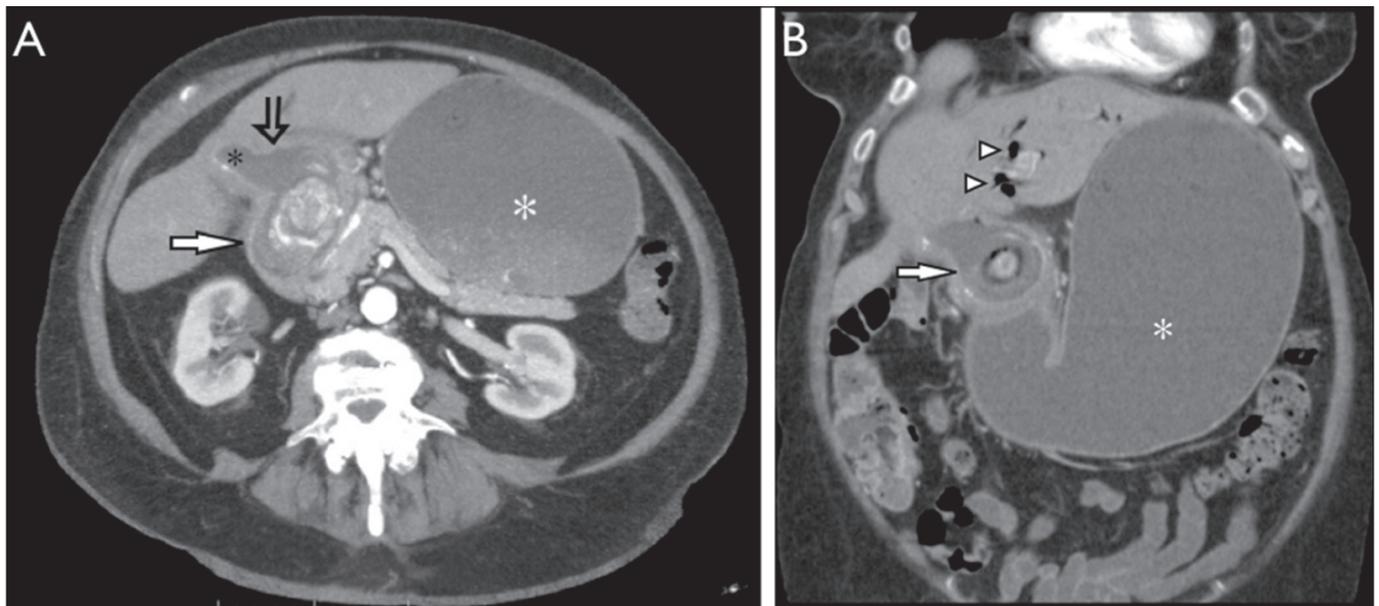


Fig. 1. A. Contrast-enhanced axial CT image shows a gastric retention (white asterisk) secondary to impaction of a gallstone in the proximal duodenum (white arrow). A small gallbladder (black asterisk) and cholecysto-duodenal fistula (open arrow) are also shown. B. Contrast-enhanced coronal CT image shows a gastric retention (white asterisk) secondary to a gallstone in the proximal duodenum (white arrow). Aerobilia is also identified (arrowheads).

## DISCUSSION

Bouveret's syndrome was first described by Leon Bouveret, french internist, in 1896 (1). It is a type of gallstone ileus that causes gastric outlet obstruction due to the lodge of a gallstone in the pylorus or proximal duodenum (1-5). It occurs more frequently in old women with history of biliary disease (2). The clinical symptoms are not specific and include abdominal pain, nausea, vomiting, anorexia and epigastralgia (2).

Radiographic features of gallstone ileus are the classical Rigler's triad that consists of pneumobilia, dilated small bowel and an ectopic gallstone. The most common sites of impaction, by frequency, are terminal ileum, proximal ileum, distal jejunum, colon and duodenum or stomach. When the gallstone lodges in the duodenum or stomach leading to gastric outlet obstruction it is named Bouveret's syndrome (occurring in 2-3 % of patients) (3,4).

Plain radiography may show the classic findings described above whereas MDCT often provides accurate diagnosis. Nevertheless it is important to remark that up to 15-25 % of gallstones are isodense to adjacent liquid, which difficult its identification (2). Early diagnosis of this entity is very important because of its relevant morbidity and mortality (up to 30 %) (3).

## REFERENCES

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