

Bouveret Syndrome: un uncommon cause of gastric outlet obstruction

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A 70-year-old male patient presented to the Emergency Department with a history of dyspnea, anorexia, and fever. While waiting for observation, the patient had a syncope with loss of sphincter control. He was hypotensive, and tachycardic, had signs of poor peripheral perfusion and abdominal distension. Laboratory findings showed elevated inflammatory parameters, acute kidney injury, and metabolic acidemia.

The patient underwent an abdominal and pelvic computed tomography (CT) study (Figure 1), which revealed exuberant gastric distention and wall thickening of the pylorus

A nasogastric tube was placed, draining 1 liter of gastric content. On endoscopy the stomach was found to remain filled with abundant content and the scope could not be passed through the pylorus due to non-distensibility of its wall.

A thorough review of the CT study revealed the existence of pneumobilia, which raised the suspicion of a colecystoenteric fistula. A subtle dense image was seen inside the pylorus.

The CT study was repeated with oral contrast material (Figure 2), which confirmed the presence of a gallstone lodged in the pylorus surrounded by oral contrast material.

The patient showed a good clinical evolution after conservative treatment and was discharged with a referral to a gastroenterologist appointment for follow-up.

Gastric outlet obstruction caused by gallstone impaction in the distal stomach or proximal duodenum is designated Bouveret syndrome. It occurs most frequently in elderly women. Probably due to the patient's advanced age and comorbidities, mortality is still high. Clinical presentation and laboratory findings are nonspecific. Symptoms may include nausea, vomits, and epigastric pain.¹

The presence of the Rigler triad (bowel obstruction, pneumobilia, and an ectopic gallstone) on the abdominal radiography can be the clue to the diagnosis. Ultrasound may also suggest the diagnosis, although findings can be difficult to interpret. CT can demonstrate the Rigler triad and also the fistula, if it is filled with oral contrast material or air. The identification of the gallstone may be challenging if it is radiolucent. As in our case, oral contrast material can be very helpful because a gallstone surrounded by oral contrast material will be more easily visualized. In patients unable to take oral contrast material, Magnetic Resonance cholangiopancreatography may be very helpful for the detection of radiolucent gallstones.²

The preferred therapy approach is endoscopy because patients are commonly poor surgical candidates. If endoscopic treatment fails, surgery is needed.¹

Fast removal of an obstructing stone is important because this condition causes significant morbidity and mortality. For that reason, prompt diagnosis is crucial.²

References

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