Bouveret Syndrome

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Abstract: Bouveret's syndrome is a common clinical condition in elderly patients. It is a gastric outlet obstruction caused by impaction of a gallstone that passes through a cholecystoduodenal or cholecystogastric fistula and gallstone ileus is a rare complication of cholelithiasis. Endoscopic extraction is the preferred therapy. Although gallbladder lithiasis is a common disease, however, a Bouveret syndrome represents an uncommon complication.

Keywords: Bouveret syndrome; Gallstone ileus; Bilioenteric fistula

1. INTRODUCTION

Bouveret syndrome is a gastric outlet obstruction caused by impaction of a gallstone that passes through a cholecystoduodenal or cholecystogastric fistula and gallstone ileus is a rare complication of cholelithiasis. Endoscopic extraction is the preferred therapy. Although gallbladder lithiasis is a common disease, however, a Bouveret syndrome represents an uncommon complication.

Ileus is an occlusion or paralysis of the bowel action for the passage of the intestinal contents. This situation can occur either to mechanical or to functional ileus. Mechanical ileus is a common complication after previous surgery. The other causes of the mechanical ileus including external compression, blockage of the gastrointestinal lumen and modification in the bowel wall (tumor, inflammation/infection) [1]. Small-bowel ileus is usually due to adhesions from prior surgery (65%) or hernia (15%), while large-bowel ileus is usually due to cancer (70%) or to adhesions and stenoses after recurrent diverticulitis (up to 10%) [2].

Co-existent of Bouveret syndrome and Gallstone ileus is rare as 3% - 6% [3].

2. CASE REPORT

A 59 year old man admitted to emergency service with the complaint of abdominal pain and emezis. The patient did not have a gas-gaita outlet for a week. Vital signs of the patient was as following, TA: 96/45 mmHg, Pulse: 102/min, Fewer:36.5°C and O2 Sat: 85%. Liver cirrhosis has been on his medical history. On physical examination, lound sounds were bilaterally decreased and ralles were heard on bases. Acid, sensitivity and defense were present in the abdominal examination. His consciousness was confused, oriented and co-operated. On his lab tests WBC:1,22 10^3/µL, Hgb:8,5g/dl, Plt:28 10^3/µL, AST:17U/L, ALT:10U/L, Crea:1,8mg/dl, Na:138mmol/l, K:4,56mmol/l, Glu:98 mg/dl, INR: 1.67. Porcelain pouch and portal vein thrombus had showned in main portal vein on abdominal ultrasonography (USG). Abdomen computarized tomography (CT) taken from the patient for the suspicion of acute abdomen clinic ileus. So ileus observed in the patient with bilioenteric fistula on CT scans [Figure 1]. After the diagnose of Bouveret Syndrome the patient hospitalized in the general surgery intensive care unit.

Figure 1. Ileus observed in the patient with bilioenteric fistula on CT scan
3. DISCUSSION

Gallstone ileus as a complication of cholecystolithiasis is a well-described situation in old patients. It is the result of chronic inflammation of the gallbladder. The insidans of this clinic after cholecystolithiasis operations is 4.8% [4]. Bilioenteric fistulas, cholecystocolonic and cholecysto gastric fistulas can be seen after this chronic irritation. The cholecystoenteric fistulas seen in 0.3-0.5% of the patients with cholelithiasis, the majority as cholecystoduodenal (60%) [5]. The gallstones can occur via the fistula or the opposite of this situation is also correct.

The large gallstones may block the intestinal passage by mechanical obstruction and cause gallstone ileus [6].

The main presenting symptoms for a Bouveret syndrome are nausea, vomiting and abdominal pain. The physical examination may signs for evidence of mechanical ileus. The bowel sounds are classic in the early phase and they are decreased and also absent. Murphy sign may help for the suspicion of cholelithiasis. The imaging Rigler triad (duodenal obstruction with a dilated stomach, pneumobilia and ectopic gallstone in the duodenum) is important for the diagnosis.

Endoscopy (with or without lithotripsy) is usually the first therapeutical choice, particularly in patients with have not comorbidities, but surgery has the highest achievement rate. Cholecystoenteric fistulas which have been treated by laparoscopy has been showned on literature. The physicians coincide the 4.8% of major post operation complications and 11.1% of minor postoperation complications after the laparoscopy [7].

The mortality of the patients with Bouveret syndrome without duodenal perforation is 25% of the patient and the prognosis of these patients depends on the comorbidities of the patient, the advanced age and the delay in the diagnosis [8].

4. CONCLUSION

In this case we want to share the possibility of migration of a large gallstone in to the duodenum with a bilioenteric fistula and cause of an ileus. The diagnosis of Bouveret syndrome depends on a clinical suspicion. Imaging methods may increase the patients early diagnose chance. It will be reduce the mortality and complications after surgery.

REFERENCES


