Bowel Obstruction Due to Large Gallstone—Gallstone Ileus: Case Report

Hamri Asma, Narjis Youssef and Benelkhaiat Ridouan
Department of Surgery, Ibn Tofail Hospital, MohamedVI University Hospital, University of Medicine and Pharmacy, Marrakech 40000, Morocco

Abstract: Gallstone ileus is an unusual and peculiar complication of biliary lithiasis. Less than 1% of gallstones migrate into the gut, causing 25% of non-strangulated small bowel obstructions in elderly population. Diagnosis is difficult, leading to late operation. Considering the median age of the patients and the fact that in most cases surgery is delayed, there is a lot of dispute regarding the best approach. Recent technical facilities in diagnostic and surgical practice seem to be irrelevant for the general outcome. We report a case of a woman, 70 years-old, diabetic with old history of gallbladder cancer (old abdominal scan 2 years ago). She was admitted to hospital for after 3 days of worsening abdominal pain and subocclusion. The scanner showed an occlusion on an ileal discrepancy with parietal calcifications. The gallbladder was unseen. Particular elements suggesting the ethiology were absent. The surgical exploration: very large gallstones occluding the ileon. Enterolithotomy was practiced with gallstone extraction and suture. The cholecystectomy was impossible cause the hepatic mass. The patient died two days later because of pulmonary embolism.

Key words: Gallstone ileus, intestinal obstruction, surgery.

1. Background

Gallstone ileus represents a rare (0.3%-0.5%) [1], but serious complication of a common illness—the gallbladder lithiasis and the incidence of this fascinating disease has remained the same over the years. The main actual characteristics of this pathology are the age over 65, the female gender (men/women ratio 1/5:1:10—due to the high rate of vesicular lithiasis) and the under 50% diagnostic established preoperatively. The frequency of gallstone ileus recurrence is of 4.7%-5%. Diagnosis is difficult, leading to late operation. Considering the median age of the patients and the fact that in most cases surgery is delayed, there is a lot of dispute regarding the best approach. Recent technical facilities in diagnostic and surgical practice seem to be irrelevant for the general outcome [2].

2. Case Report

We report a case of a woman, 70 years-old, diabetic with old history of gallbladder cancer (old abdominal scan 2 years ago). She was admitted to hospital for after 3 days of worsening abdominal pain and subocclusion. The scanner showed an occlusion on an ileal discrepancy with parietal calcifications, the gallbladder was unseen. Particular elements suggesting the ethiology were absent. The surgical exploration: very large gallstones occluding the ileon. Enterolithotomy was practiced with gallstone extraction and suture (Fig. 1). The cholecystectomy...
was impossible cause the hepatic mass (not resectable and abstention regarding primary repair of the fistula). The patient died two days later because of pulmonary embolism.

3. Discussion

Gallstone ileus, a rare complication of cholelithiasis, is caused by intestinal impaction of a gallstone that has migrated through a cholecystoenteric fistula. Mortality is high, up to 22.7%, largely because most patients are elderly with associated comorbidities. The nonspecific clinical presentation tends to delay diagnosis and treatment. The classic radiologic sign of gallstone ileus is the Rigler triad (also called Rigler sign): pneumobilia, intestinal obstruction and an ectopic gallstone [3]. Plain abdominal radiography can be valuable in the initial workup of a suspected small-bowel obstruction. However, gallstone ileus is easily missed on plain radiographs, because most gallstones are radiolucent and all 3 elements of the Rigler triad show up in only 15% of cases. Although formal guidelines are lacking, expert opinion supports the early use of abdominal CT scanning when gallstone ileus is suspected, with the Rigler triad seen in up to 80% of cases when CT is used. The decision to intervene surgically depends on the patient’s clinical condition. Enterolithotomy alone (without cholecystectomy and fistula repair) is the preferred option in frail, older patients [4].

5. Conclusion

Gallstone ileus should be suspected in the elderly with SBO symptoms. Early diagnosis can reduce post-operative complications. Treatment is urgent laparotomy and the surgical approach must be individualized for each case.

References