Gallstone Ileus

S Elhaboni, S Elhasi, S Abunnaja

Citation

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Abstract

We report a patient with gallstone ileus and cholecystoduodenal fistula at Aljalla hospital, Binghazi – Libya. A 50-year-old female patient was admitted to the hospital with a provisional diagnosis of acute appendicitis. She had a history of biliary disease documented by ultrasound 1 year back.
She presented with right lower abdominal pain and frequent vomiting. She was febrile, with moderate abdominal distention and tenderness at the right iliac fossa. Ultrasonography revealed a contracted gallbladder with no visible calculi. Plain abdominal film showed dilated bowel with no other significant findings.
An exploratory surgery was performed, which provided the following findings: contracted gallbladder with intense surrounding inflammation, cholecystoduodenal fistula and congested dilated small bowel loops at the terminal ileum with a palpable intraluminal oval hard mass. Cholecystectomy, closure of the duodenal fistula, enterolithotomy and appendectomy was all performed in one stage procedure. The size of the gallstone found at the terminal ileum was approximately 6 cm.

INTRODUCTION

Gallstone ileus is a rare disease and accounts for about of 3.7% of mechanical bowel obstructions, increasing to 12% in patients older than 60 years. ([1]) Concomitant cardio-respiratory diseases or diabetes are frequent in older patients and responsible for the high mortality rate.

The operative strategy of a one-stage procedure includes enterolithotomy, cholecystectomy and closure of the fistula to prevent cholangitis, cholecystitis and recurrent ileus caused by further gallstones. However, this procedure bears the risk of enteric or biliary leakage after fistula closure. It should therefore be reserved for patients presenting in good general condition with a low degree of cholecystitis.

CASE REPORT

A 50-year-old female patient with the diagnosis of a gallbladder stone (GBS) documented by ultrasonography (US) of the abdomen one year back (single large stone) presented to our hospital with a history of lower colicky abdominal pain for about 24 hours with maximum intensity at the right iliac fossa. The pain was radiating all over the abdomen, associated with frequent attacks of vomiting and loss of appetite. There was no change in her bowel habit, bleeding per rectum or history of weight loss. She had had a caesarian section 15 years back.

On physical examination, the patient was febrile and appeared dehydrated with no jaundice or pallor. There was a mild abdominal distention, tenderness over the lower abdomen and rebound tenderness. Bowel sounds were exaggerated.

There was leukocytosis; all other blood investigations were within normal ranges. Plain abdominal X-ray showed dilated loops of small bowel, more at the right iliac fossa; no other findings were detected. Ultrasonography of the abdomen revealed a partially contracted gallbladder with no evidence of stones and dilated bowel loops in the lower abdomen. A provisional diagnosis of acute appendicitis was made at that time and after a period of resuscitation the patient was explored through right paramedian incision.

The operative findings were: congested dilated small bowel loops at the terminal ileum with a palpable intraluminal oval hard mass (figure 1), normal looking appendix, contracted gallbladder with lots of adhesions to the surrounding structures and a fistula with the duodenum. One stage procedure including cholecystectomy, enterolithotomy (figures 2 and 3), and closure of the fistula as well as appendectomy was performed.

Figure 1

Figure 1

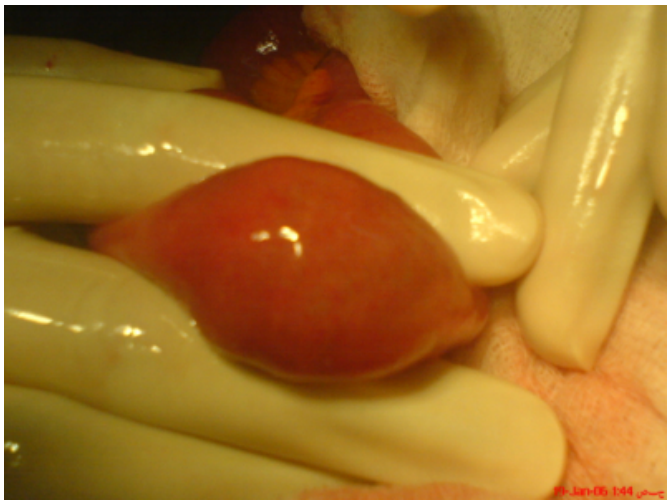


Figure 2

Figure 2

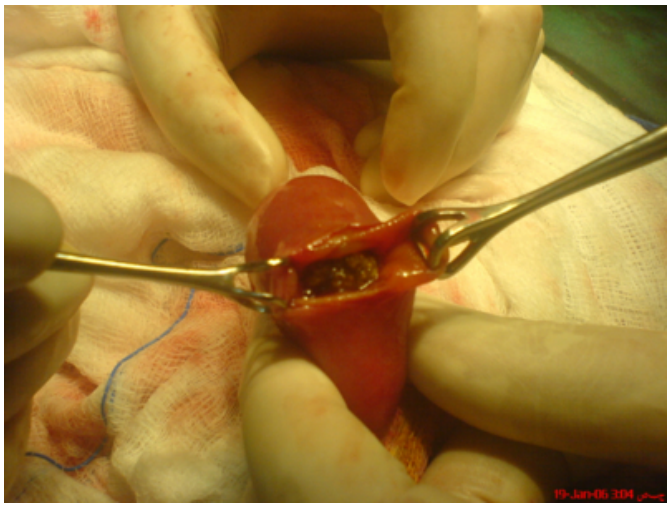
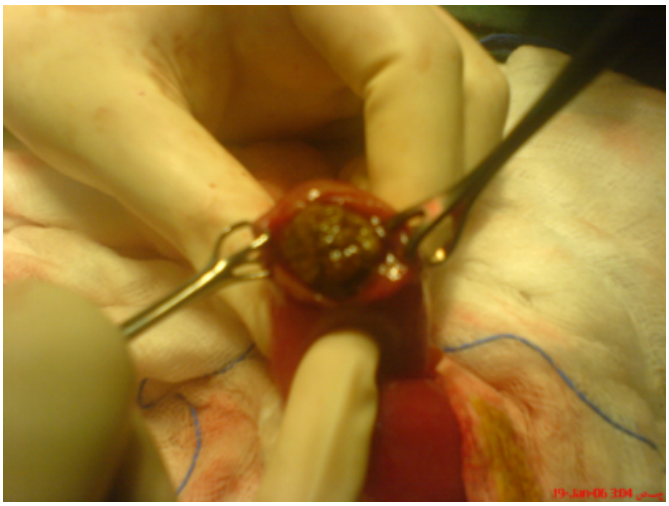


Figure 3

Figure 3



DISCUSSION

Gallstone ileus is a rare disease especially below the age of 60 years, as in our patient, and accounts for about of 3.7% of mechanical bowel obstruction at this age; it occurs only in 0.66% of cases of cholelithiasis.

The clinical diagnosis is difficult ([2,3,4]) and radiographic examinations are frequently inconclusive. ([3,4,5]), but the presence of the following radiographic findings may aid in diagnosis: signs of partial or complete intestinal obstruction, air in the biliary tree (pneumobilia) and direct visualization of a stone. But apart from dilated bowel loops in the lower abdomen, none of these signs were seen in the X-ray of our patient, and the diagnosis was made intraoperatively.

In most cases surgical treatment is mandatory to work out both the bowel occlusion and bilioenteric illness. Operative strategies include: one-stage procedure including enterolithotomy, cholecystectomy and closure of the fistula, or two-stage procedure where only enterolithotomy is done and the cholecystoduodenal fistula is dealt with at a subsequent operation.([6]) We performed a one-stage procedure and our patient recovered well and was discharged one week later in a good general condition.

CORRESPONDENCE TO

Salim .s. Abunnaja 1918 Mississippi ave, apt A, St. Louis MO Zip: 63104 Tel: 3147237676 E-mail: salimsalah2006@yahoo.com

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Author Information

Salih Elhaboni
Libyan Board of Surgery, Department of Surgery, Aljalla Hospital, Garyounis University

Salma Elhasi
Libyan Board of Surgery, Department of Surgery, Aljalla Hospital, Garyounis University

Salim S. Abunnaja, MBChB
Department of Surgery, Aljalla Hospital, Garyounis University