

A RARE CASE OF GALL STONE ILEUS WITH OBSTRUCTION OF SMALL BOWEL

ABSTRACT:

Gallstone ileus is true mechanical obstruction of the bowel lumen secondary to impaction of one or more gallstones. It is uncommon entity which accounts for 1-4% of all small bowel obstruction². It is more common in elderly people. Diagnosis mainly confirmed by x-ray, USG, CT SCAN. Surgical relief of gastrointestinal obstruction remains the mainstay of operative treatment.

KEYWORDS: Gallstone ileus, cholelithiasis, small bowel obstruction, Enterolithotomy

INTRODUCTION:

The term “ileus” is a misnomer since the obstruction is a true mechanical phenomenon. Gallstone ileus is an infrequent complication of cholelithiasis results from impaction of one or more stones from gallbladder enter into intestine by cholecysto-enteric fistula. Open surgery is the mainstay of treatment.

CASE REPORT:

A 48-year-old female came with history of pain abdomen for three days, vomiting for one day and abdominal distention for one day. On examination pulse rate 96 per minute, BP 110/80 mmHg, per abdomen examination mild abdominal distention was seen. Bowel sounds were hyper, rectal examination was empty. Initial blood investigations showed raised leucocyte count and rest of the investigations were normal. X-ray showed few dilated small bowel loops. USG abdomen showed dilated small bowel loops and a calculus measuring 1.5cm in GB (which

is pneumobilia on CT) and calculous in ileum measuring 3*3 cm. CECT abdomen was done which showed pneumobilia (initially thought as GB calculi in USG), and calculi in the mid ileum around 3cm*3cm*2.5cm in dimension with proximal dilated small bowel loops. There was a cholecysto-duodenal fistula with omental stranding around the GB. Laparotomy with enterolithotomy and extraction of gall stone was carried out successfully. Nothing was done for Fistula between GB and DUODENUM. Patient was extubated and shifted to recovery then ward. Recovery was uneventful.

Image 1. USG showing gall stone in small bowel

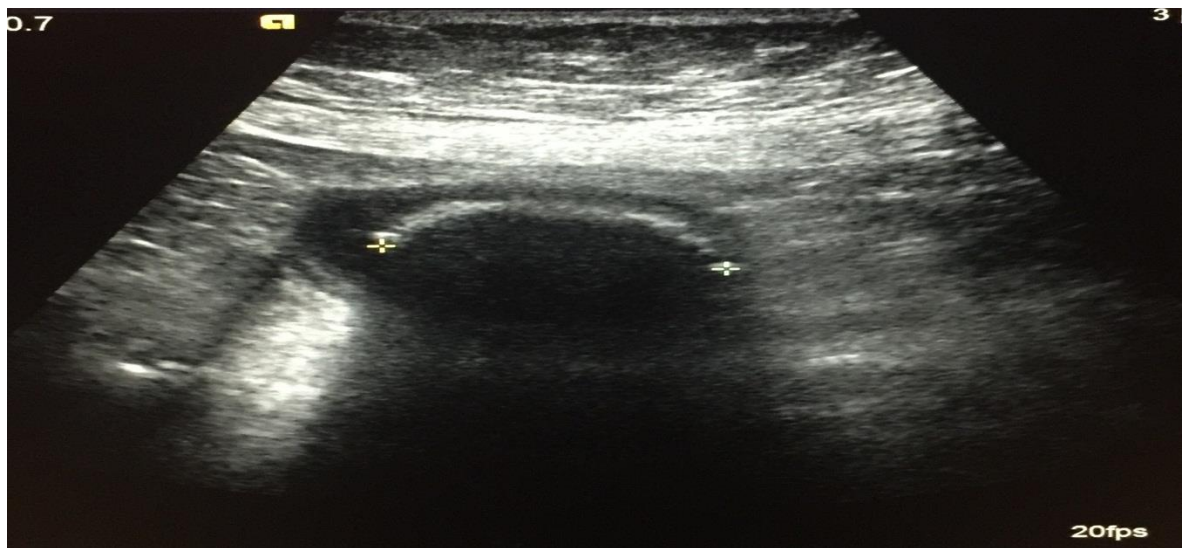


Image 2. CT scan showing gallstone in small bowel

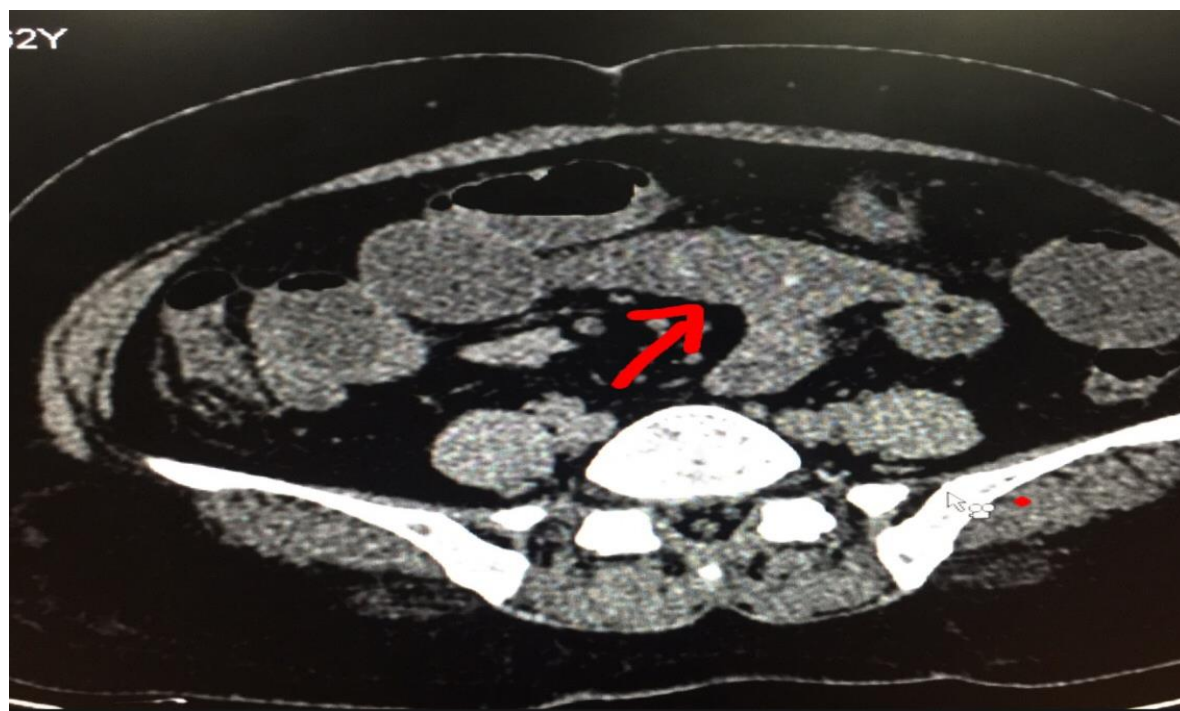


Image 3. CT scan showing cholecysto-duodenal fistula.



Image 4. Intra operative findings dilate small bowel with gallstone in distal ileum

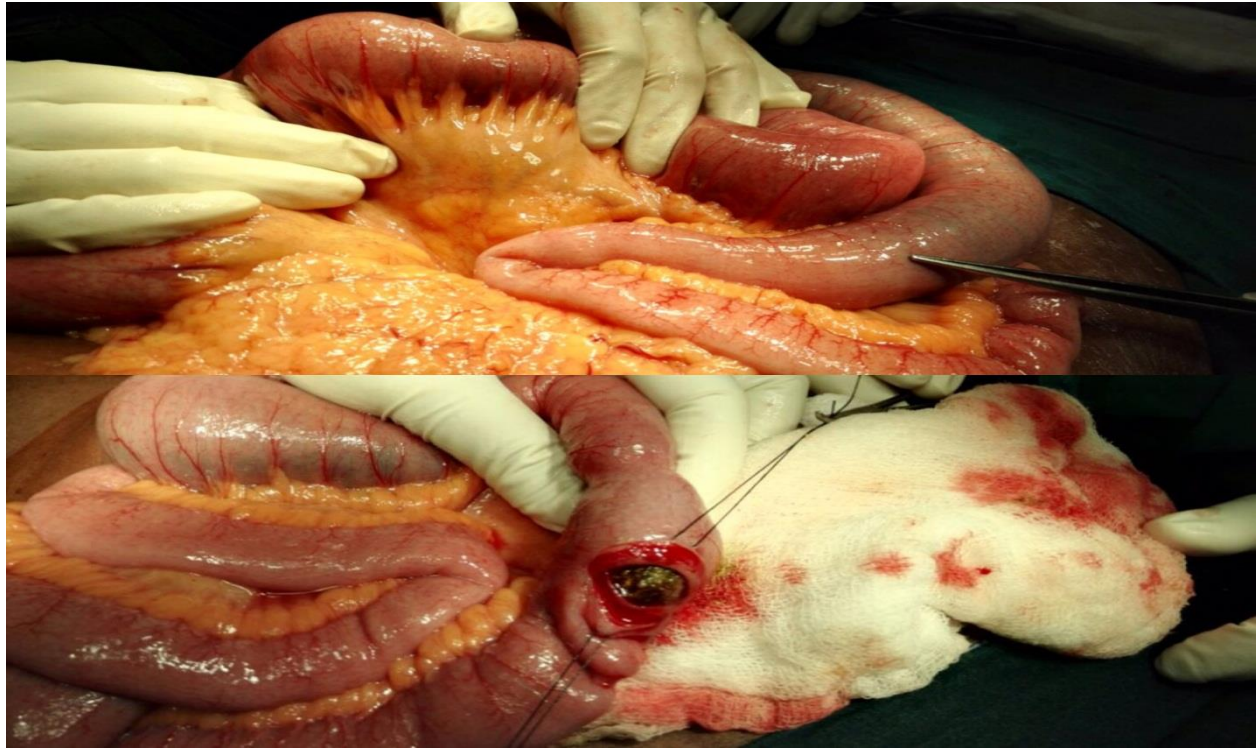
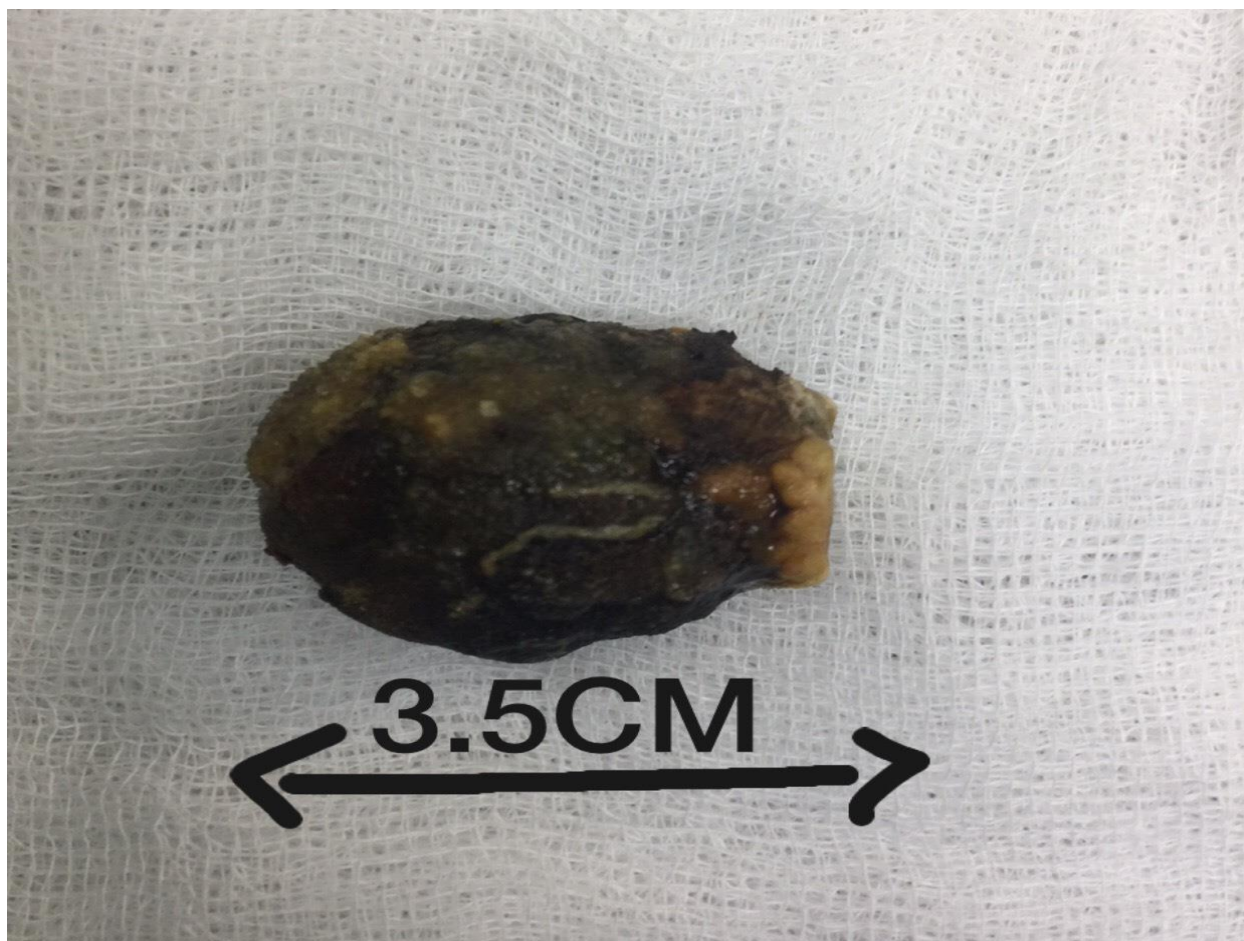


Image 5: Gallstone of 3.5cm extracted from ileum



DISCUSSION:

The term gallstone ileus, which was coined by Dr. Erasmus Bartolini in 1654 [1]. Gallstone ileus is a rare complication of cholelithiasis, accounting for 1%-4% of all cases of bowel obstruction². In 1896, Bouveret described a syndrome of gastric outlet obstruction caused by an impacted gallstone in the duodenal bulb after its migration through a cholecystoduodenal or choledochoduodenal fistula [8]. It is caused by one or more gallstone becoming impacted within the lumen [3]. The pathogenesis of gallstone ileus involves adhesions forming between the inflamed gallbladder and an adjacent part of the gastrointestinal tract. Subsequently, large stones within the gallbladder cause pressure necrosis, resulting in formation of a cholecyst–enteric fistula, which allows gallstones direct access to the gut [7]. It is more common in elderly and females. Any part of the bowel can be affected, i.e. the ileum (60.5%), jejunum (16.1%), stomach (14.2%), colon (4.1%) and duodenum (3.5%). Usually stone impaction occurs in the terminal ileum and the ileocecal valve because of the anatomically natural narrowing of the lumen. [4,5]

Diagnosis of gall stone ileus should be considered in patients who are elderly and with history of gallstones and no history of previous surgery and tuberculosis. On plain abdominal radiography, classical signs of Rigler's triad i.e. pneumobilia, dilated intestinal loops, aberrant gallstone aid diagnosis [6].

The principal goal in management of gallstone ileus is a quick effective relief of mechanical bowel obstruction. Spontaneous passage of gallstones large enough to cause impaction has been reported, but most patients require intervention. If the stone is in within reach of an endoscope, either in the proximal small bowel or in the colon, it may be treated by lithotripsy and removal of the fragment [9]. Extracorporeal shockwave lithotripsy has also been used successfully, but this method is limited by bowel gas. Unfortunately, the majority of patients require surgery. Surgical options include enterotomy and removal of the stones (enterolithotomy), most of the authors favor enterolithotomy in first procedure followed by cholecystectomy and repair of fistula in later settings.

CONCLUSION:

Even though Gallstone ileus is rare cause of obstruction, when dealing with elderly patients without any history of surgery, gall stone ileus should be considered. early surgery remains the main stay of treatment.

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