

## A RARE CASE OF BILIARY ILEUS AND A REVIEW OF LITERATURE

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#### Abstract:

The biliary ileus is an intestinal lumen occlusion generated by one or more gallstones passage from the cholecyst to the intestinal lumen by a bilio intestinal fistula. Gallstone ileus is a rare complication of gallstones, with a difficult clinical diagnosis and high mortality rate. The imagistic tests show specifics images: pneumobilia, intestinal obstruction and an aberrantly located gallstone. Surgery remains the mainstay of treatment, but the optimal management is still controversial.

Fig. 1. CT scan – intestinal gallstone



### Patient & Method:

We report the case of a 92-year-old female who has been presented at our institution with 5 days history of vomiting and epigastralgia, with a diminished intestinal transit. Abdominal computed tomography (CT) revealed a large gallstone in the middle ileus, aerobilie and intestinal obstruction. The exploratory laparotomy confirmed the gallstone presence and revealed also a small couverte ileal perforation. She underwent enterolithotomy and simple perforation closure and had an uneventful postoperative course.

Inspired by the rarity of this pathology, we reviewed the literature on the diagnosis and treatment.

### Results & discussion:

The term "gallstone ileus" was first coined by Bartolin in 1654. Gallstone ileus is a rare complication of gallstones that occurs in 1-4% of all cases, but augment at 25% in population after 65 years. It usually occurs in the elderly people, with a female predominance and may result in a high mortality rate 12-27%. Its clinical diagnosis is difficult, whilst early diagnosis could reduce the mortality. The most common locations of impaction of gallstone are the terminal ileum and the ileocecal valve (60.5%). Less common localizations are the jejunum (16.1%), and the stomach (14.2%), whilst the rarest Fig. 3. Biliary stone, 4 cm are the duodenum (3.5%) and the colon (4.1%). Clinical presentation is typically non-specific. Classical findings on imagistic procedures (Abdomen Direct, Ultrasonography, CT) include pneumobilia, intestinal obstruction and an aberrantly located gallstone. Multiple stones can be expected in 3-44% of all patients with gallstone ileus, and there could be a recurrent gallstone ileus.

Surgery remains the gold standard treatment, but the optimal management is still controversial:

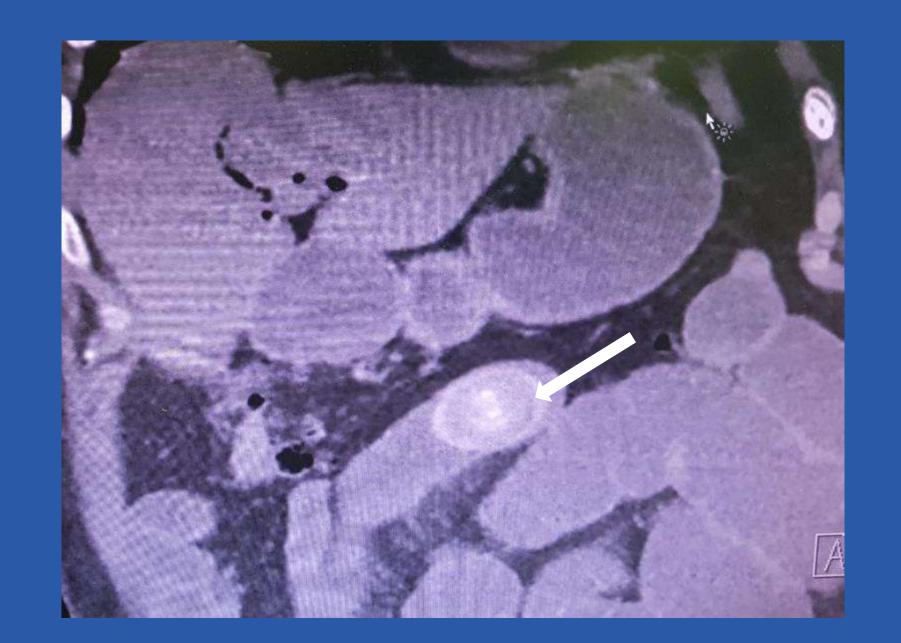
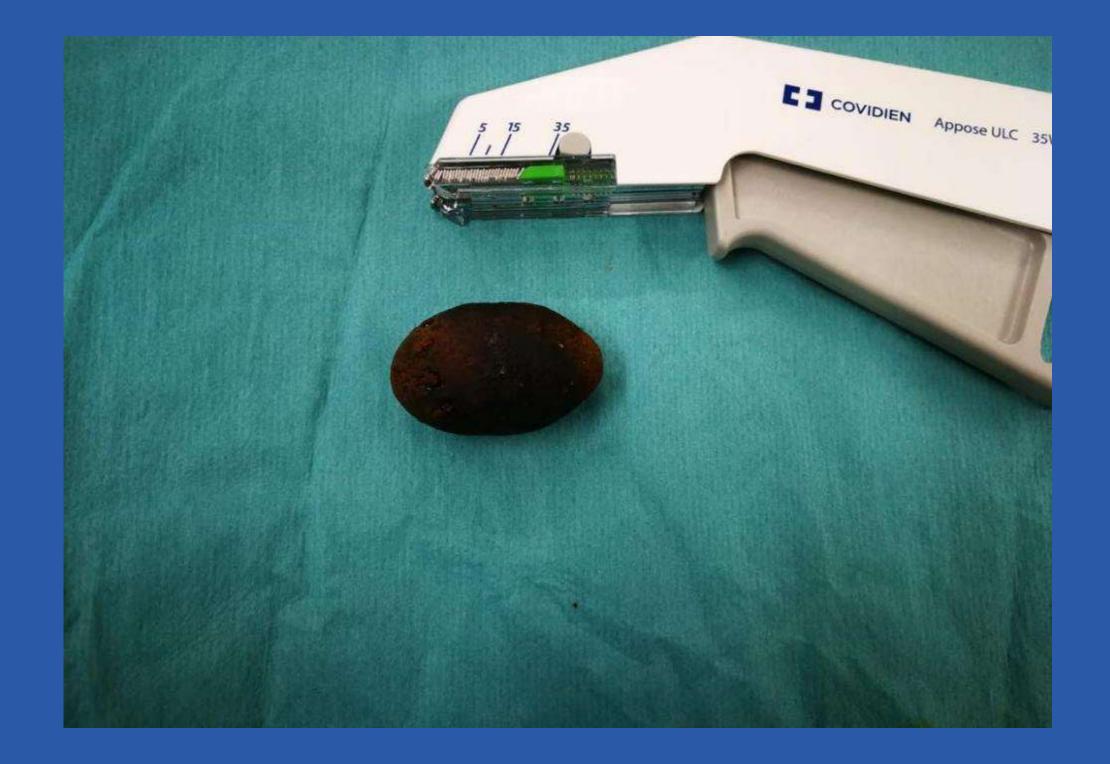


Fig. 2.. CT scan – Intraluminal gallstone



(1) conservative treatment if the ectopic gallstone sizes is less than 2 cm; (2) enterotomy with stone extraction alone; (3) enterotomy, stone extraction, cholecystectomy and fistula closure; (4) bowel resection alone; and (5) bowel resection with fistula closure.

# Conclusion & perspectives:

The morbidity and mortality rates of gallstone ileus remain very high (mortality ranges between 12% and 27%), partly because of misdiagnosis, delayed diagnosis, senile patient and coexisting concomitant medical diseases. Therefore, early diagnosis and prompt treatment could reduce the mortality rate. The current routine use of CT for abdominal emergencies allows to detect such condition earlier. It also has the capability to estimate the size of ectopic gallstones that contributes to decision-making in management strategy.