# **BILIARY ILEUS – THERAPEUTIC ATTITUDE IN EMERGENCY**

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*Keywords:* gallstones ileus, emergency, bilioenteric fistula **Abstract:** Gallstones ileus is an extremely rare complication of gallstones characterized by the appearance of a more or less complete intestinal obstruction, caused by the impacting of the calculus on the intestine, originated from the biliar vesicle through the cholecystenteric fistule.(1,3) First mentioned by Bartholin in 1654, yet the condition is described in detail in 1892 by Naunyn regarding 127 cases.(1) The authors present the case of a patient, 75 years old, who was admitted to our hospital with acute onset of nausea, vomiting, diffuse abdominal pain, abdominal distension, ceasing of gas intestinal functions and worsening of the general health status. Intraoperatively, he was diagnosed with gallstone ileus. The purpose of the paper is to underline the superiority of the two stage procedure, in the case of high morbidity patients.

**Cuvinte cheie:** ileus biliar, urgență, fistulă biliară

**Rezumat:** Ileusul biliar reprezintă o complicație rară, dată de pătrunderea calculilor de la nivelul colecistului în lumenul intestinului subțire, printr-o fistulă bilio-digestivă, determinând la acest nivel oprirea tranzitului intestinal pentru materii fecale și gaze cu apariția ocluziei intestinale. A fost descrisă pentru prima dată de către Naunyn pe 127 de cazuri în 1892. Autorii prezintă cazul unui bărbat de 75 de ani, hipertensiv, cu un AVC în antecedente care se prezintă în serviciul de urgență cu simptomatologia unei ocluzii intestinale înalte. Se intervine chirurgical de urgență, diagnosticul postoperator fiind de ileus biliar apărut în urma unei fistule bilio-digestive. Lucrarea exprimă opinia autorilor în legătură cu atitudinea terapeutică în urgență în ileusul biliar.

#### INTRODUCTION

Gallstone ileus accounts for approximately 1% to 4% of all cases of mechanical bowel obstruction. However, in the population over the age of 65, it is the cause of 25% of non-strangulated small bowel obstructions.

Diagnosis is often delayed and mortality is high, ranging from 15% to 18%, which may also reflect the age and comorbidity of the affected patients. Gallstones usually enter the bowel through a biliary enteric fistula, which complicates 2% to 3% of the cases of cholecystolithiasis with associated episodes of cholecystitis.(2) Due to the sedimentation of intestinal content, gallstones increase in diameter as they pass the bowel.

The majority of obstructing gallstones are located in the terminal ileum (50% to 75%), followed by the proximal ileum and jejunum (20% to 40%). Gallstones impacted in the duodenum account for less than 10%.(3)

### CASE REPORT

The patient aged 75 years old was admitted to the Emergency Unit of Sibiu with acute onset of nausea, vomiting, diffuse abdominal pain, abdominal distension, ceasing of gas/intestinal functions and worsening of the general health status. His past medical history revealed cholecistectomy, disabling stroke with left hemiparesis, hypertension.

Abdominal examination revealed abdominal tenderness and guarding in the central area.

Laboratory tests revealed elevated levels of blood urea nitrogen (148mg/dL; normal 18-55), creatinine (1,34mg/dL; normal 0,7-

1,3), VSH (24mm/h; normal 0-10), low levels of seric ionogramm: Cl (81 mEq/l normal 98-107), K (2,9 mEq/l normal 3,5-5,3).

Laboratory findings also revealed leukocytosis and neutrophilia. Radiography shows the presence of hydroaeric levels and suggestive radiopaque image of the calculus. (figure no. 1)

#### Figure no. 1. Abdominal Rx



After the clinical evaluation and laboratory tests, the patient is diagnosed with intestinal obstruction.

The intraoperative diagnosis was of gallstone ileus. We found two stones, one of them fixed on the ileo-cholic

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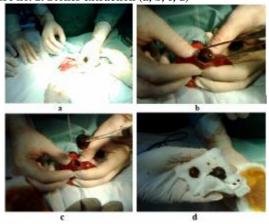
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junction and a fistula between gallbladder and duodenum.

We made an enterolithothomy, and we removed the stones. We let the fistula untouched, because of the multiples comorbidities. The postoperative evolution was not a good one abdominal dehiscence occurring.

The further evolution was good and the patient was discharged ten days after.

Figure no. 2. Stones extraction (a, b, c, d)



DISCUSSIONS

Gallstone ileus is a rare but potentially serious complication of cholelitiasis. It is usually preceded by a history of biliary symptoms.

It usually occurs as a result of a large gallstone creating and passing through a cholecysto-enteric fistula.

Most of the times, the stone will pass the gastro intestinal tract without any problems, but large enough stones can cause obstruction.

The goal of treatment in gallstone ileus is the early relief of the intestinal obstruction and the minimization of morbidity and mortality. The one-stage procedure includes enterolithotomy, cholecystectomy, and fistula repair. The two stage procedure includes initial urgent enterolithotomy and 4-6 weeks later by cholecystectomy and fistula closure.

In our case, we chose a simple enterolithotomy due to our patient's advanced age, comorbidity and worsening of the general health status. This certainly led to a swift and simple operative procedure on our patient with complete recovery, the patient being discharged from the hospital on the 9th day.

## CONCLUSIONS

Biliary ileus is a condition that has to be taken into account in the differential diagnosis of the occlusal syndrome in emergency, in the case of the elderly.

We believe that this attitude may be elective in difficult situations with increased life-threatening. We believe that always, the goal is to save the patient's life, even with minimal surgical gestures.

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