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A Case Report of a Probable Gallstone Ileum

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Abstract

Biliary ileus is an infrequent complication of cholelithiasis that occurs in less than 0.5% of cases. It is used more than one study of immunology given its difficult diagnosis. We report the case of a 49-year-old patient admitted for occlusion, in which the triad of biliary ileus was not characteristic.

Keywords

Gallstone ileus; Calculus; Obstruction

Introduction

Biliary ileus is an infrequent complication of cholelithiasis that occurs in less than 0.5% of cases but beyond 70 years, being responsible for 25% of occlusions. It is more prevalent in woman [1,2]. It is an organic occlusion by an obstruction, due to the endoluminal passage duodenal, jejuno-ileal. The most common site of the calculus is the ileocecal valve (60%) followed by the proximal ileum (25%) and the distal jejunum (9%).

The pathophysiological mechanism of biliary ileus requires in 80% to 85% of cases the constitution of a bilio-digestive fistula, which in 70% of cases is of the cholecystoduodenal type. This is secondary to repeated acute cholecystitis, which causes the appearance of inflammatory peri-vesicular rearrangements to which is added mechanical erosion from a lithiasis.

In 15% to 20% of cases, stones migrate spontaneously in a trans-papillary manner. Nevertheless, biliary ileus may also be a complication of endoscopic sphincterotomy or the result of intra-operative lithiasis dispersion during a cholecystectomy that results in a migration of a gallstone into the intestinal lumen over time [3].

The beginning of the presentation may be acute, subacute or chronic. The patient with acute biliary ileus usually arrives in the emergency department with a sudden onset of abdominal distention, vomiting, and constipation. Biliary ileus subacute presentation has a variety of symptoms of low-grade intestinal obstruction.

The chronic type, or Karewsky's syndrome, is characterized by recurrent episodes of pain caused by the passage of gallstones into the intestine, accompanied by an asymptomatic period, reaching a complete obstruction in several stages [4-6].

The clinical symptoms vary depending on the site of the obstruction. In the case of intestinal obstruction, there is abdominal distension, pain, vomiting, lack of peristalsis, constipation and water imbalance. The patient may also have jaundice. Physical examination and laboratory tests reveal no particular cause of intestinal obstruction [7].

A diagnosis can be suspected with an elderly patient with a history of gallstones, signs of acute cholecystitis, and sudden intestinal obstruction. However, other causes of intestinal obstruction may be possible such as previous abdominal surgery, incarceration or constriction of hernia and abdominal tumors should be excluded [8].

After reviewing the clinical history and performing the physical exam, paraclinical tests are requested. Laboratory studies may show high white blood cell counts, abnormal liver function tests and, in very rare cases, electrolyte imbalance. Therefore, their diagnostic importance is less.

The diagnostic imaging criterion for biliary ileus is called the Rigler triad and consists of the presence of radiopaque stones, present in less than 10% of cases, and distention of intestinal loops. The presence of 2 of the 3 signs establishes the diagnosis. It should be noted that pneumobily is not pathognomonic for biliary ileus, as it may occur after surgery or endoscopy of the gallbladder, as well as in cases of the incompetence of the sphincter of Oddi [9].

Biliary ileus is a condition in elderly patients who usually have concomitant diseases. Clinicians must suspect this disease in elderly patients with intestinal obstruction but this clinical entity is rare, the medical literature on the subject is limited and there is not much information of atypical cases [8].

Observation

A 49-year-old male patient with a history of severe gallstone disease and no other co-morbidities was reported to have had an intermittent diffuse abdominal pain episode with no other symptomatology in December 2018. He was admitted to the emergency room in January 2019 for fecaloid vomit.

At the clinical examination, it was found a conscious patient, slight jaundice, hemodynamically stable. The abdominal examination was slightly distended abdomen and sensitive to the pressure but without any other symptoms. Biological assessment and blood ionogram performed was normal without abnormalities. Afterward, an abdomen radiography study was carried out which reflected distended intestinal loops (Figure 1). Radiography in AP showing distended intestinal loops.

Later on, an abdominopelvic tomography was performed and showed distended loops, (Figure 2), and the presence of an approximate 6cm foreign body located in the terminal ileum (Figures 3 and 4). So the diagnosis of ileus biliary was retained.

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Figure 1: Radiography in AP showing distended intestinal loops.

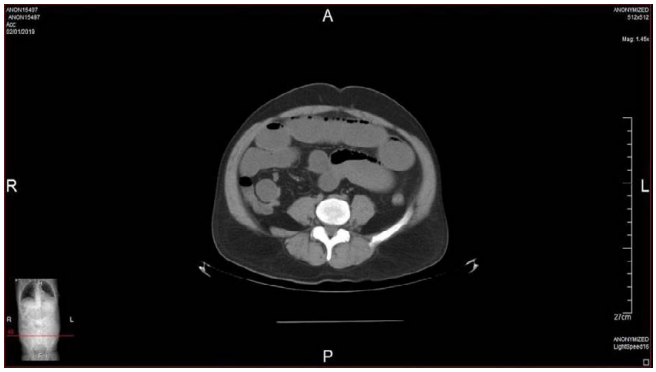

Figure 2: Abdominal tomography in axial section showing distended intestinal loops.

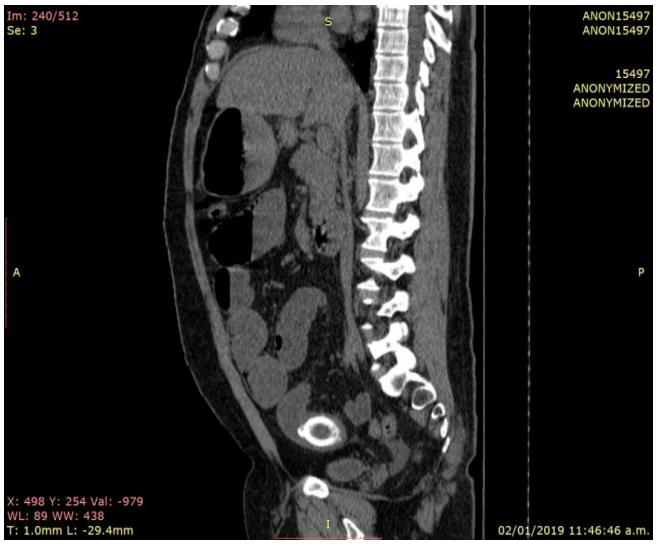

Figure 3: Abdominal tomography in sagittal section showing the presence of a foreign body located in the terminal ileum.

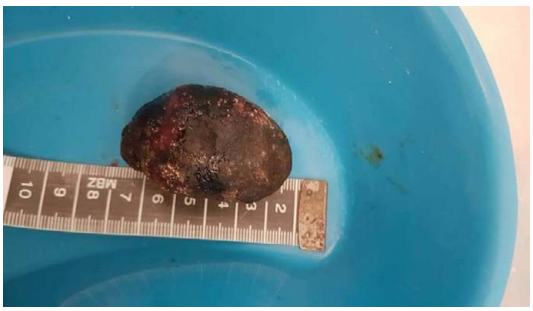

Figure 4: Longitudinal measure of calculus.

The occlusion chart presented by the patient and thus the non-improvement, he was taken in charge of the surgery department, approached by median umbilical laparotomy with sigmoidotomy extraction of the embedded calculus. The postoperative were uncomplicated [10].

Conclusion

The first description of biliary ileus is attributed to Bartholin in 1654. Biliary ileus is a mechanical bowel obstruction caused by the endo-luminal migration of a gallstone in the aftermath of a cholecystectomy. It is observed more frequently in women between 70 and 80 years. In the elderly, it accounts for a quarter of the mechanical bowel obstruction.

Riegler's triad, described in 1941 on unprepared abdomen images: images of intestinal obstruction, pneumobilia, and ectopic gallstone are not constant elements. In this case, exposes the patient presented two points of the triad except for pneumobily. We can find in the percentage that patients with the three elements are a minority of the population (30% to 39%).

Biliary ileus is an infrequent complication of cholelithiasis that the majority of times the treatment is surgical. It is a diagnosis that we must think in front of all mechanical bowel obstruction in an elderly person without excluding other groups because it is possible an atypical presentation as this case exposed. The clinic continues to be a fundamental point at the time of the diagnosis.

Conflict of Interest

The authors state that they have no conflicts of interest.

Ethical Consideration

The authors declare that this article does not contain personal information that allows the identification of the patient.

Author's Contribution

All authors have read and approved the final version of the manuscript.

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