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ORIGINAL ARTICLE

Gallstone ileus, experience in the Dr. Eduardo Liceaga General Hospital of Mexico☆

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KEYWORDS
Gallstone ileus;
Cholelithiasis;
Intestinal obstruction;
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Abstract
Background: Gallstone ileus is a rare cause of intestinal obstruction (1–4%). It results from the migration of a gallstone through a bilio-enteric fistula. Treatment begins with fluid therapy, followed by enterolithotomy, fistula closure, and cholecystectomy.
Objectives: To determine the clinical presentation in patients with gallstone ileus and subsequent medical-surgical management outcomes.
Material and methods: A retrospective, observational, descriptive and transversal study was conducted on patients diagnosed with intestinal obstruction secondary to a gallstone ileus from May 2013 to October 2014. The following variables were recorded: age, sex, comorbidities, mean time of onset of symptoms, length of preoperative and postoperative stay, imaging studies, biochemical tests, type of surgical management, stone location and size, complications, mortality, and postoperative follow-up.
Results: The study included 10 patients (male:female ratio, 1:4), with a mean age of 61.9 years. The mean time of onset symptoms 15.4 days, and preoperative stay was 2 days. On admission, 80% of patients had leukocytosis and neutrophilia, and 70% with renal failure. The most common surgical management was enterolithotomy with primary closure (50%), finding 80% of the stones in the terminal ileum. Recurrence was found in 2 cases. Mean postoperative hospital stay was 6.3 days. Mortality was 20%.

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Conclusions: Gallstone ileus most commonly presented in women in the seventh decade of life, with intermittent bowel obstruction. On hospital admission, they presented with systemic inflammatory response, electrolyte imbalance and abnormal liver function tests. Initial treatment must include fluid-electrolyte replacement, and tomography scans must be made in all cases. In our experience, the best procedure is enterolithotomy and primary closure, which presented lower morbidity and mortality.

PALABRAS CLAVE
Íleo biliar;
Colelitiasis;
Obstrucción intestinal;
Fístula bilioentérica

Íleo biliar, experiencia en el Hospital General de México Dr. Eduardo Liceaga

Resumen
Antecedentes: El íleo biliar es una causa infrecuente de oclusión intestinal (1-4%), producida al migrar un lito por una fístula bilioentérica. El tratamiento consiste en reanimación hídrica, enterolitotomía, cierre de fístula y colecistectomía.
Objetivos: Determinar las condiciones de presentación clínica de pacientes con íleo biliar y su evolución posterior al manejo médico-quirúrgico.
Material y métodos: Estudio retrospectivo, observacional, descriptivo y transversal de pacientes ingresados con el diagnóstico de oclusión intestinal, debida a íleo biliar. De mayo del 2013 a octubre del 2014, registramos las siguientes variables: edad, sexo, comorbilidades, duración del cuadro clínico, estancia preoperatoria y postoperatoria, imagenología, resultados de laboratorios, manejo quirúrgico, ubicación y tamaño de litos, complicaciones, recidiva, seguimiento postoperatorio y mortalidad.
Resultados: Se obtuvieron 10 pacientes (relación hombre: mujer 1:4), edad media 61.9 años, media de tiempo de cuadro clínico 15.4 días, estancia preoperatoria 2 días; el 80% presentó leucocitosis y neutrofilia, falla renal el 70%. La cirugía más realizada fue enterolitotomía con cierre primario (50%). El 80% de los litos se localizaron en íleon terminal. Hubo 2 recidivas. Media de estancia postoperatoria de 6.3 días y mortalidad del 20%.
Conclusiones: El íleo biliar se presentó en mujeres de la séptima década de la vida, con cuadro de oclusión intermitente de larga evolución. Al ingreso presentaban datos de respuesta inflamatoria sistémica, desequilibrio hidroelectrolítico y alteraciones en pruebas funcionales hepáticas. Se debe realizar una adecuada reanimación hidroelectrolítica y tomografía en todos los casos. El mejor procedimiento, en nuestra experiencia, es enterolitotomía y cierre primario; este último es el que presenta menor morbimortalidad.

Background

Gallstone ileus, according to Beuran et al.[1] was described by Bartholin in 1654 in an autopsy.[1] It is a mechanical intestinal obstruction due to the impaction of one or more gallstones in the gastro-intestinal tract, secondary to a biliodigestive fistula.[2,3] The first case of duodenal obstruction was described by Bonnet in 1841, but Bouveret established a preoperative diagnosis of a similar situation as late as 1893. The first reported case of an obstruction in the colon was in 1932, by Tunner.[1–3]

Since 1990, gallstone ileus has been described as a rare complication of cholelithiasis that occurs in 1–4%, and represents up to 25% intestinal obstructions in people over the age of 65.[4] Approximately 50% of patients with gallstone ileus have a history of cholelithiasis, but only 0.3–1.5% of patients with cholelithiasis go on to present gallstone illeus.[5,6]

It can present from the age of 13 to 97 years, more common in females (male:female ratio from 2.3:1 to 16:1).[7]

The apparently most common mechanism of gallstone ileus is migration of a stone from the gallbladder to the duodenum via a cholecystoduodenal fistula (68–95%).[1] However, the possibility is also mentioned of fistulas that involve the stomach and colon.[2] The mean measurement of these stones is 2.5 cm.[1]

The migrating stone commonly lodges in the terminal ileum or the ileocaecal valve, segments of the intestine where there is reduced movement and calibre.[1]

There are 3 forms of clinical presentation: *acute*, the classical presentation of gallstone ileus; *subacute*, presenting as partial intestinal occlusion and *chronic*, known as