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SURGICAL IMAGES

Transrectal endoscopic treatment of gallstone ileus



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A 71-year-old woman sought emergency care for diffuse abdominal pain. The clinical presentation was intestinal obstruction in the last 24 hours with no sign of complication. There was no hernia and the digital rectal examination was normal. One month earlier, the patient had experienced an episode of acute cholecystitis with sonographic evidence of biliary cholelithiasis. Cholecystectomy was scheduled six weeks later. During the four weeks since the acute episode, the patient had lost weight (15 kg) and experienced alternating diarrhea and transient constipation. Blood tests revealed no sign of inflammation and liver tests were normal. Computed tomography of the abdomen and pelvis demonstrated colonic distension reaching the rectosigmoid junction and a change in caliber in contact with a rosette image with peripheral calcification (Figs. 1 and 2). We retained the diagnosis of gallstone ileus related to a cholecysto-colonic fistula. Transrectal endoscopic treatment was feasible: the gallstone was mobilized and successfully extracted per rectally. Lithotripsy was not necessary (Figs. 3 and 4). The postoperative follow-up revealed that the cholecysto-colonic fistula was a benign complication of xantho-granulomatous cholecystitis.

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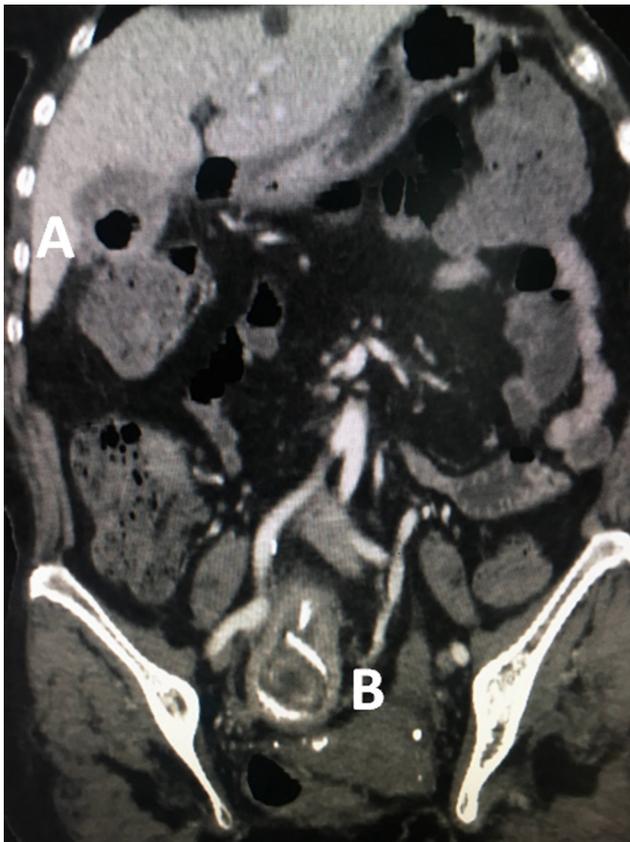


Figure 1. Computed tomography of the abdomen and pelvis with contrast injection (portal time). Frontal slice through (A) the cholecysto-colonic fistula; and (B) the intra-sigmoidal stone.



Figure 2. Computed tomography of the abdomen and pelvis with contrast injection (portal time). Transverse slice through a round rosette image with peripheral calcification suggestive of an intra-colonic gallstone in the rectosigmoid junction.

Gallstone ileus is rare (1% of digestive obstructions) [1] and even more so when caused by an intra-colonic stone (4% of gallstone ileus cases). This clinical situation is observed predominantly in women aged 60 years or over [2]. The case we describe illustrates the usefulness of computed tomography to precisely identify the cause of the obstruction. Open surgical extraction is the gold standard for gallstone ileus in order to remove the obstacle and search for other stones,



Figure 3. Computed tomography of the abdomen and pelvis with contrast injection (portal time). This transverse slice shows (A) the gallbladder (thick walls, air); (B) the cholecysto-colonic fistula; (C) and the inflammatory right transverse colon in contact with the fistula.

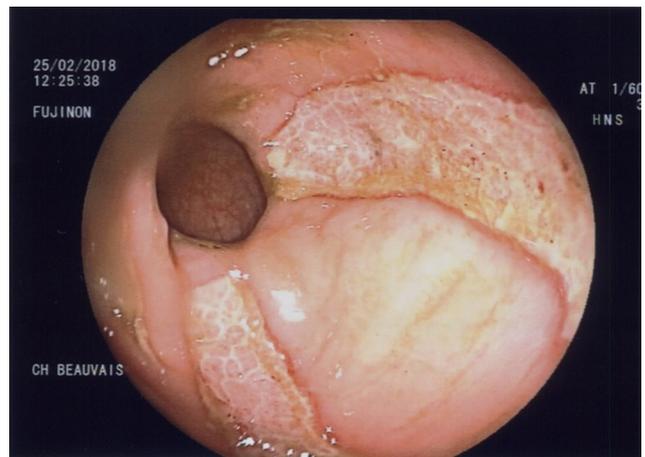


Figure 4. Transrectal endoscopy image showing the erosion of the rectosigmoid mucosa caused by the gallstone.

in addition to treating the cholecysto-colonic fistula as proposed by some authors. The gallstone is generally embedded in the ileum, prohibiting an endoscopic approach. Nevertheless, in our case transrectal endoscopy was possible and successful, a rare example of less invasive treatment for fragile elderly patients.

Disclosure of interest

The authors declare that they have no competing interest.

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