Letters to the Editor

Gallstone ileus with spontaneous resolution

Dear Editor,

Gallstone ileus is an unusual cause of intestinal obstruction. It is caused by impaction of one or more gallstones that enter the intestinal lumen via a cholecystoenteric fistula. Gallstone ileus is sometimes a challenge clinically and delayed diagnosis could carry a significant rate of complication and mortality. Resolution of gallstone ileus by spontaneous evacuation of gallstone is extremely rare. We present a case of gallstone ileus patient with a severe co-morbidity, treated with conservative treatment successfully by spontaneous evacuation of gallstone.

Case report

A 71-year-old woman developed nausea, abdominal fullness and intermittent colicky pain for 10 days. She had an incidentally finding of gallstones by health survey half year ago. She had medical history of a huge thyroid nodule (10x6 cm), hypertension, atrial fibrillation and ischemic heart disease. On presentation, her vital signs revealed temperature of 36.4 °C, pulse of 97/min and blood pressure of 160/88 mm Hg. Physical examination showed distended, mild tender abdomen and hyperactive bowel sound. The blood tests showed white blood count of 11,700/ul with 93% neutrophils and normal biochemical values as electrolytes, liver function and amylase. Abdominal X-ray showed pneumobilia, dilated small bowel loop and two calcified lesions (Fig. 1A). Computed tomography revealed pneumobilia, distended loops of small intestine without ischemic pattern, a 2.6 cm impacted stone in the distal ileum (Fig. 1B). The diagnosis of gallstone ileus was made. Evaluating the clinical condition and stone size, conservative treatment was considered to be a benefit for the high surgical risk patient. She received the nasogastric tube decompression and fluid resuscitation. 16 hours later, the patient got diarrhea with clinical improvement.

Discussion

Gallstone ileus is an uncommon cause with 1–3% in all mechanical small bowel obstruction (SBO), but frequently seen in elderly patients (1). Plain abdominal radiography has an important role in the assessment of SBO. Rigler triad is a classically radiographic signs of gallstone ileus, consisted of pneumobilia, bowel loop dilatation and ectopic stone. Ultrasound and computer tomography (CT) scan could apply prompt diagnosis for gallstone ileus (2). Kasahara reported a gallstone must be at least 2.5 cm to result in intestinal obstruction (3). Our experi-
ence presented CT could offer crucial evidence for the diagnosis of gallstone ileus and the accurate size of gallstone (4). In the literature, surgical exploration was done for gallstone ileus with stones sized larger than 3 cm at least. Our patient presented complicated high surgical risk due to severe co-morbidity of heart, huge thyroid nodule. The successful conservative treatment was achieved by appropriate image findings, careful evaluation of stone size and clinical symptoms. Our case suggested an optional conservative management for gallstone patients with stone sized between 2.5 and 3 cm, particularly in high risk surgical condition.

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References