

## PICTURES IN DIGESTIVE PATHOLOGY

### Gallstone ileus presenting as obstructive gangrenous appendicitis

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#### INTRODUCTION

We present the very unusual case of a 38-year-old woman with acute appendicitis and intestinal obstruction. During surgery, a 2.5 cm gallstone impacted at the base of the cecal appendix was found as the cause of a gangrenous appendicitis and obstruction; a choledochal-duodenal fistula was found during the same surgery with no gallstones remaining in the gallbladder or elsewhere.

The case was managed by appendectomy with retrieval of the gallstones, and no other procedure was performed for the gallbladder or the fistula, since no other gallstone was found on examination. Previously, she was found to have a round, radio-opaque image on the right iliac fossa; on imaging it was initially identified as an appendicolith, but after pathological examination it turned out to contain cholesterol and calcium bilirubinate.

Gallstone ileus as the cause of an obstructive gangrenous appendicitis is a very unusual disease presentation that should be kept in mind when finding an unusual appendicolith presentation in or out of the appendix.

#### CASE REPORT

The patient was a 38-year-old female without any relevant medical history. She was admitted with a history

of three days of abdominal pain in the right iliac fossa, vomiting, anorexia and mild fever. Upon physical examination she presented with tachycardia, fever of 38.5 °C, important abdominal distention with tenderness over the right inferior quadrant and rebound.

Blood examinations showed hemoglobin levels of 15.4 g/dl, hematocrit 46.6%, platelets 233 x 10<sup>3</sup>/dl, leucocytes 4,530, neutrophil count 84.7%, creatinine 0.9 mg/dl, and glucose 118 mg/dl.

On plain X-rays there was an important dilation of bowel loops, with a round radio-opaque image on right lower quadrant and hydro-aerial levels. The CT scan showed a hyper-dense image on right lower quadrant, suggestive of a fecalith (Fig. 1).

She underwent an exploratory laparotomy; the appendix had purulent and fibrinous effusion and over the base of the appendix there was an extended necrotic area with a round and firm structure inside. A Halsted appendectomy was performed and a thorough examination of bowel loops was undertaken, when the gallbladder was found to be firmly adhered to the duodenum. The patient underwent an uneventful evolution and was discharged on day 4. Pathological examination of the appendix showed appendicitis with a gallstone of 2.5 cm (Fig. 2A and B).

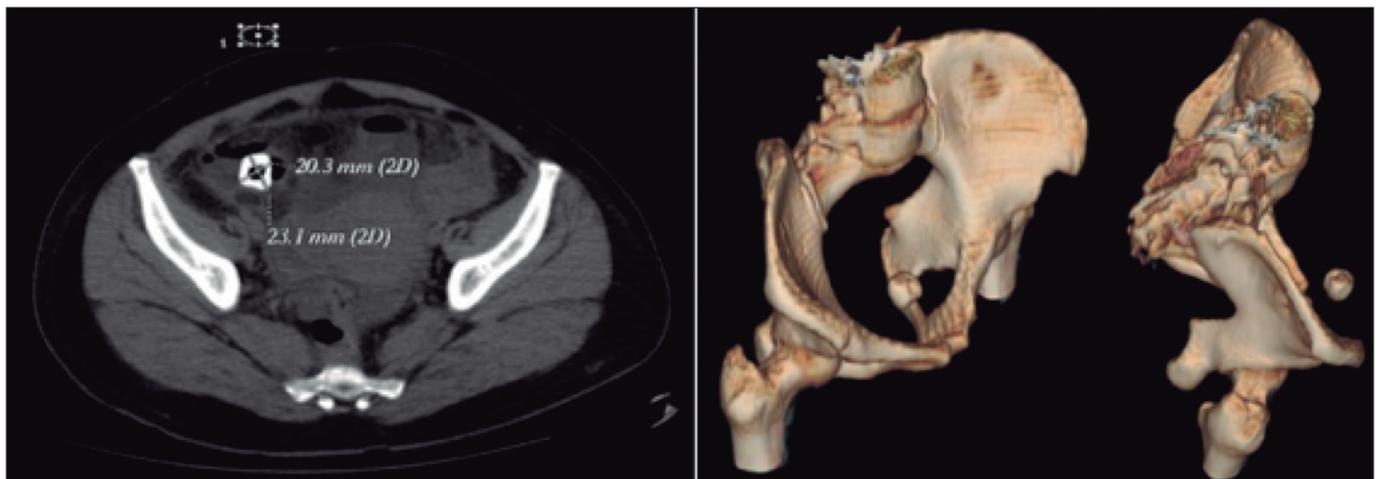


Fig. 1. CT scan and reconstruction showing a hyper-dense image on right lower quadrant, suggestive of a fecalith.

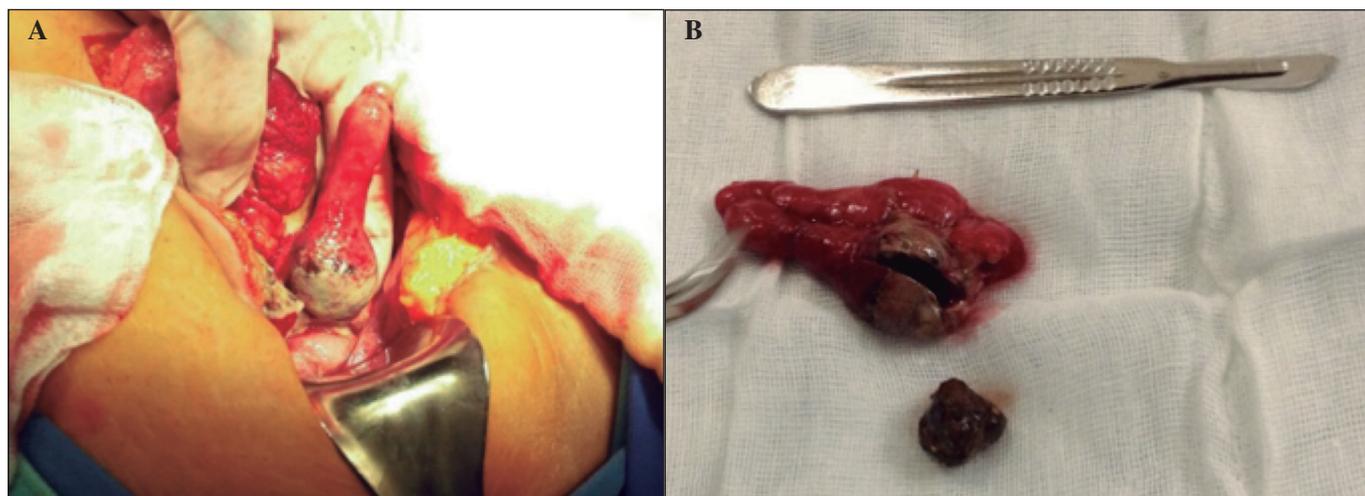


Fig. 2. A and B. Surgical images of the appendix with an inflamed base containing the gallstone.

In this particular case and based on the current literature, we recommend to treat the appendicitis and leave the bilioenteric fistula and cholecystectomy until a later time, although the choice of treatment should always be made based on clinical grounds and on an individual basis (1-3).

## REFERENCES

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