

Gossypiboma: Unusual Treatment For A Usual Presentation: A Case Report

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ABSTRACT

A case of gossypiboma with intra-abdominal abscess and subsequent gastric fistula which was successfully managed by percutaneous removal of the retained sponge is presented. The English literature is reviewed.

Gossypiboma is not an uncommon surgical complication but it is rarely reported mainly due to medico-legal problems. A report of a correct sponge count in the operating room does not exclude the possibility of a retained surgical sponge. Certainly it is the responsibility of the surgeon to make sure that he did not leave any sponge behind.

We are presenting a case of gossypiboma. She presented 2 years post-operatively with an intra-abdominal abscess and gastric fistula. She was treated with percutaneous drainage of the abscess followed by percutaneous removal of the sponge.

THE CASE

A 46 year old female presented with a recurrent umbilical swelling for 2 years. She had a history of umbilical hernia repair done 3 years ago and a repair of a recurrent umbilical hernia 1 year later. After the second surgery, she developed an abscess which was drained surgically under GA. All of the above operations were done in another hospital.

On examination she was febrile (39°C), tachycardiac and her blood pressure 90/70 mmHg. Abdominal examination revealed midline scar about 12 cm long with tender ill-defined mass underneath the scar. The working diag-

nosis was incarcerated recurrent umbilical hernia with an abscess resulting from gangrenous omentum. All of the laboratory investigations were normal except for the full blood count which showed microcytic hypochromic anaemia (Hb 9.3) and leukocytosis (9,700).

Plain abdominal film AP and lateral views showed foreign body marker in the mid abdomen as well as spotted gas in a focal area close to the marker and away from the distribution of the fecal material in the large bowel suggesting an abscess formation (Fig 1). A subsequent CT scan revealed a large rounded intra-peritoneal mass in the mid abdomen which has a thick enhancing wall filled with multiple air bubbles. It was displacing the transverse colon posteriorly (Fig 2). Therefore, the patient was diagnosed as a case of intra-abdominal abscess secondary to the presence of foreign body.

She was started on triple antimicrobials (ampicillin, metronidazole and gentamicin) which later was changed according to the culture. Drainage of the abscess was done using size 14F catheter which was left for few days till the draining material became scanty. Under fluoroscopy, sinogram showed the abscess cavity exactly where it was expected from the plain film and fistula connecting the abscess cavity to the stomach (Fig 3). Though this case might be managed surgically, we elected to avoid this option at the first instance as it may cause spreading of the infection and it may be difficult to close the gastric fistula in presence of pus. Alternatively, the foreign body was removed percutaneously assuming that the fistula will close spontaneously.

Removal of the foreign body was done through the same draining track after dilatation to 34 French. Large

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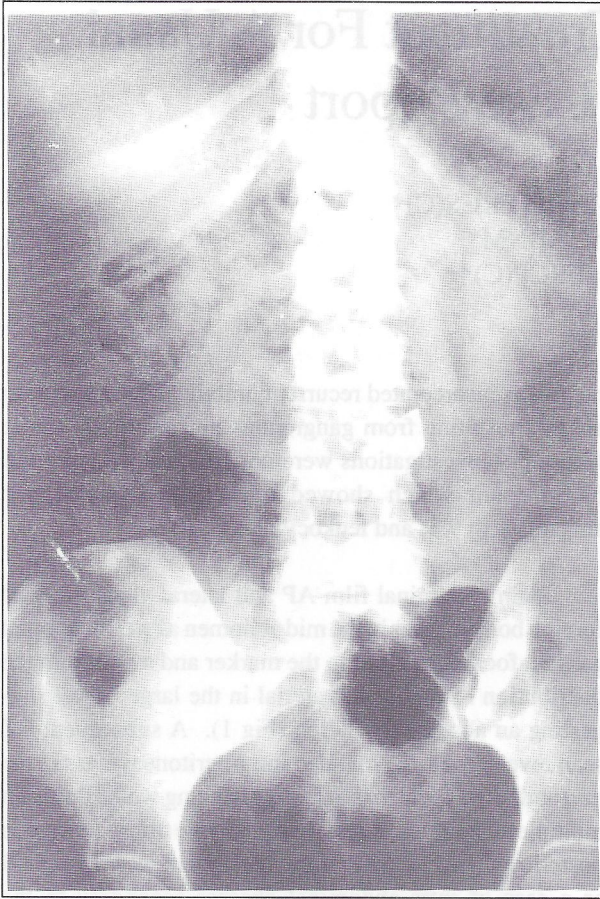


Figure 1: Foreign body marker surrounded by the abscess: which is demonstrated by presence of multiple small gas bubbles away from large bowel.

piece of gauze was removed under fluoroscopy by crocodile forceps. The patient did well and drainage decreased gradually from 100 cc (1st day) to 5 cc (few days later) and

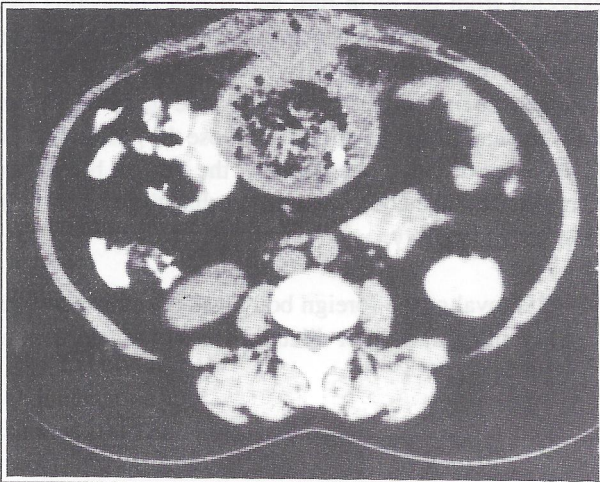


Figure 2: Axial CT mid abdomen: Abscess with thick wall inflammatory soft tissue reaction close to anterior abdominal and transverse colon.



Figure 3: After drainage sinogram: Shows size of abscess cavity as well as a fistula between it and the stomach.

the drain was removed. The gastric fistula closed spontaneously later. The patient was extremely well, one year after this procedure.

DISCUSSION

The incidence of gossypiboma varies between 1 in 100 and 1 in 3000 procedures¹. Gossypiboma can be discovered within the first 2 weeks² or many years later, the longest being 21 years post operatively³. Its presentation varies from being asymptomatic (found accidentally or may never be discovered) to fatal complications. Clinically, it may present as a palpable mass, low grade fever, acute or chronic abdominal pain, an abscess, intestinal obstruction⁴, fistula into any hollow viscus including stomach, duodenum⁵, small bowel⁶, colon⁶, rectum², or bladder².

Plain x-ray may show a marker if the sponge is labelled with radiopaque marker (which is usually the case) or calcification⁷. A whirl-like pattern has been

described as being characteristic of retained sponges⁸, this finding may be due to gas of intestinal origin trapped between the fibers of the sponge. However, this finding is not always present. Sonography of foreign body granuloma shows a uniform mass with an echogenic centre and hyoechoic rim. A central echogenic area represents the retained foreign body which strongly attenuates the sound wave. Previous reports of CT finding⁹⁻¹⁰ have described foreign body granuloma as round sharply outlined mass with dense enhancing wall. The centre of the lesion have heterogenous densities created by a whirl-like structure of high or low attenuation.

A high index of suspicion is needed to diagnose gossypiboma. Usually it is treated surgically but we think percutaneous removal is associated with less morbidity in selected cases. To the best of our knowledge this is the first case reported in the English literature.

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