Gossypiboma: A Diagnostic Dilemma

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Citation

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Abstract

Gossypiboma (retained surgical sponge) is a rare occurrence and can occur after any surgical procedure, which requires the use of internal swabs. In this case we present a 37-year-old female who had a laparotomy for a ruptured ectopic pregnancy 9 years previously and was discovered to have a retained surgical swab. This highlights the fact that this condition should always be included in the differential diagnosis of patients who have had previous surgery or even vague symptoms.

Additionally, we highlight the fact that this condition is poorly reported on in developing countries and hope that this article serves as a reminder to our fellow physicians and surgeons.

CASE REPORT

A 37-year old female presented with a 5-month history of recurrent, vague, central abdominal pain. There was no vomiting, diarrhoea, constipation, abdominal distension, fever, anorexia or weight loss. She had a mobile palpable firm, non-tender mass in the right iliac fossa. In the surgical history she had a laparotomy 9 years previously for a ruptured ectopic pregnancy.

Plain abdominal radiographs revealed a radiopaque marker in the abdomen, suggestive of a foreign body(fig. 1). A laparotomy was performed which revealed a retained surgical swab encased in a fibrous “capsule” (fig. 2)and adherent to the mesentery of the ileum. It was possible to dissect the surgical swab from the mesentery at laparotomy and the patient made an uneventful recovery postoperatively.

Figure 1

Fig. 1: Abdominal radiograph showing a radiopaque marker suggestive of a foreign body

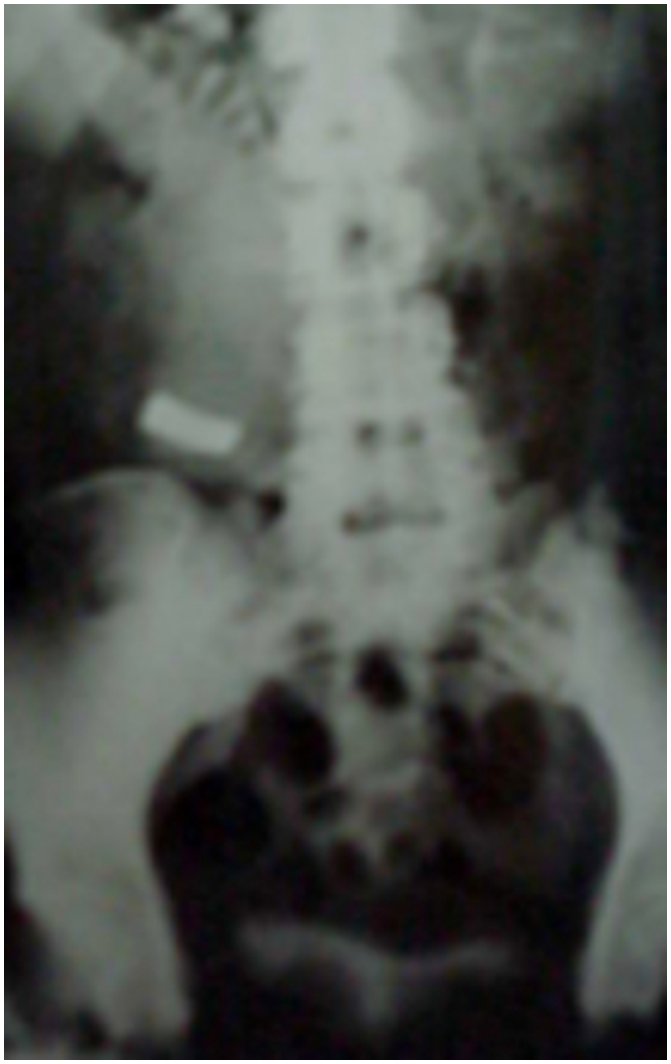
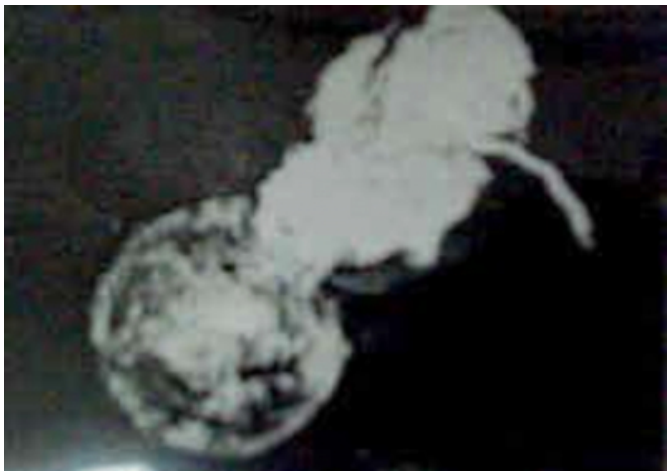


Figure 2

Fig. 2: Surgical swab encased in a fibrous 'capsule' and adherent to mesentery



DISCUSSION

Gossypiboma otherwise known as textilomas are retained surgical sponges. The word is bilingually derived from Gossypium (Latin) : cotton and Boma (Kiswahili) : place of concealment. It can occur as a complication of almost any surgical procedure such as cardiothoracic surgery [1] , exploratory laparotomy[2], gynaecologic procedures, internal fixation of fractures [3] and even after neurosurgical procedures[4].

The phenomenon of gossypiboma has been discussed in terms of a diagnostic dilemma with associated medico-legal implications [5]. Patients usually present with an abdominal mass, sub acute intestinal obstruction, fistulae, free perforation or even extrusion[6].

Septicaemia may be present in the early postoperative period with plain abdominal radiologic investigations revealing a charactersitic soft tissue mass containing air bubbles with or without a fistula[7].

A whirl-like mass, which may be calcified or may have a radiopaque marker may be present in the late postoperative period[8]. Ultrasound may be helpful, but often non-diagnostic, whereas CT shows ring enhancement, which is indistinguishable from an abscess or tumour[9].

Gossypibomas typically have an inconsistent radiologic appearance determined by the time insitu, the type of material and the anatomical location.

Furthermore, diagnostic difficulties exist since gossypibomas may present with the entire spectrum ranging from asymptomatic to producing severe life-threatening illness.

We present this case as a reminder that in desperate situations such as ruptured ectopic pregnancy, multiple trauma or even after elective surgery a proper swab count is necessary and a diagnosis of gossypiboma be entertained in patients who had previous surgery regardless of the anatomical region.

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References

1. Sheehan RE, Sheppard MN, Hansell DM. Retained intrathoracic surgical
swab: CT appearances. J Thorcaic Imaging.2000; 15(1): 61-4
2. Rappaport W, Haynes K. The retained surgical sponge following intra-
abdominal surgery : a continuing problem. Arch Surg. 1990; 125:405-7
3. Abdil-Karim Fw, Benevenia J, Pathria MN, Makley JT. Case report 736:
Retained surgical sponge (gossypiboma) with a foreign body reaction and
remote and organizing haematoma. Skeletal Radiol. 1992; 21(7): 466-9
4. Mathew JM, Rajshekhar V, Chandy MJ. MRI features of neurosurgical
gossypiboma: report of two cases. Neuroradiology. 1996; 38(5): 468-9
5. Zbar AP, Agrawal A, Saeed IT, Utidjian MR. Gossypiboma revisited: a case
report and review of the literature. J R Coll Surg Edinb. 1998; 43(6):
417-18.
6. Moyle H, Hines OJ, McFadden DW. Gossypiboma of the abdomen.
Arch Surg 1996; 131: 566-8.
7. Apter S, Hertz M, Rubinstein ZJ, Zissin R. Gossypiboma in the early post-
operative period: a diagnostic problem. Clin Radiol. 1990; 42(2): 128-9
8. Liessi G, Semisa M, Sandini F, Roma R, Spaliviero B, Marin G. Retained
surgical gauzes: acute and chronic CT and US findings. Eur J Radiol. 1989; 9(3): 182-6
9. Coche G et al. [Ultrasonography and x-ray computed tomography in the
diagnosis of intra-abdominal textiloma. Apropos of 12 cases]. J Radiol. 1988
Apr; 69(4): 243-51

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