
Gossypiboma: A Diagnostic Dilemma

M Ramdass, D Maharaj, V Naraynsingh

Citation

M Ramdass, D Maharaj, V Naraynsingh. *Gossypiboma: A Diagnostic Dilemma*. The Internet Journal of Radiology. 2000 Volume 2 Number 1.

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 surgery¹, exploratory laparotomy², gynaecologic procedures, internal fixation of fractures³ and even after neurosurgical procedures⁴.

The phenomenon of gossypiboma has been discussed in terms of a diagnostic dilemma with associated medico-legal implications⁵. Patients usually present with an abdominal mass, sub acute intestinal obstruction, fistulae, free perforation or even extrusion⁶.

Septicaemia may be present in the early postoperative period with plain abdominal radiologic investigations revealing a characteristic soft tissue mass containing air bubbles with or without a fistula⁷.

A whirl-like mass, which may be calcified or may have a radiopaque marker may be present in the late postoperative period⁸. Ultrasound may be helpful, but often non-diagnostic, whereas CT shows ring enhancement, which is indistinguishable from an abscess or tumour⁹.

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.

CORRESPONDENCE

Dr. Michael J. Ramdass
100 East Drive,
Champs Fleurs,
St. Joseph,
Trinidad, West Indies.
E-mail: jramdass@tstt.net.tt

References

1. Sheehan RE, Sheppard MN, Hansell DM. Retained intrathoracic surgical swab: CT appearances. *J Thoracic 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

Author Information

M Ramdass, MBBS

SURGERY, University of the West Indies

D Maharaj, FRCS

Surgery, University of the West Indies

V Naraynsingh, FRCS,FACS

Surgery, University of the West Indies