

Incidental Gossypiboma: A Rare Case of Postoperative Unintended Retention of Surgical Sponge

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Abstract: *Aim:* This is the interesting case report of post-operative complications in surgery, which are avoidable. However, some complication results from human error, either in intra-operative and post-operative period. One such infrequent complication is gossypiboma. **Clinical Significance:** Retained surgical sponge can have a deleterious effect. It may present at any time, from immediate postoperatively to decades after initial surgery, like in our case. The medicolegal ramifications of retained surgical foreign body for the surgeon can be significant.

Keywords: Gossypiboma, surgical retained sponge, postoperative complication, medicolegal implication

1. Introduction

Gossypiboma is the name for the tumour-like structure within the body composed of non-absorbable surgical material with a cotton matrix. The term "gossypiboma" comes from the Latin word "gossypium" (cotton) and the Swahili word "boma" (place of concealment). Textiloma, or cottonoid, is used to describe a mass in the body that comprises retained surgical sponge and reactive tissue.¹ Cotton materials are most commonly forgotten.²

Retained surgical foreign bodies is a ubiquitous medical error as long as non-absorbable materials continue to be used. The most common surgically retained foreign body is the laparotomy sponge.

Retained surgical sponges are seldom reported due to their medicolegal implications. Increasing awareness of this problem among surgeons and radiologists can reduce unnecessary morbidity.

2. Case Report

Mrs XYZ 40-year-old P3L3 with all vaginal deliveries with post-hysterectomy status presented with complaint of burning micturition on and off since 2 years and complaints of lower abdominal pain since 1 month. There was no prior history of increased frequency of micturition, urinary incontinence. The patient had no history of fever, abdominal bloating, bowel complaints. She was operated for open hysterectomy 5 years back in view of Abnormal Uterine Bleeding of which details are not available. On examination, abdomen appeared normal, low transverse scar of hysterectomy seen. No guarding, tenderness or rigidity seen. No palpable abdominal mass was

felt. Per speculum examination shows healthy vault, no discharge. On per vaginal examination a 5x5 cm cystic mass felt in midline anteriorly and adjacent to bladder. The case was provisionally diagnosed as dermoid cyst. All blood investigations were within normal limits.

USG Scan:

- 1) A heterogeneously hypoechoic cystic lesion measuring 6.7x5.4x3.3 cm seen in suprapubic region.
- 2) The lesion is thick-walled and shows internal echos with area of posterior acoustic shadowing with both the ovaries appearing normal, likely of dermoid cyst.

CECT Scan:

- 1) Cystic lesion of 4.1x3.8 cm with thin septa and focus of calcification noted in right adnexa.
- 2) Another thin-walled cystic lesion measuring 6.3x4.4x5.2 cm noted in periumbilical region superior to urinary bladder.
- 3) Bilateral ovaries not seen separately from the lesion, suggestive of bilateral complex ovarian cyst.

She was taken up for elective exploratory laparotomy for dermoid cyst excision.

Intraoperative 6x7 cm cystic, well-circumscribed mass closely adherent to bladder in retroperitoneal region (Figure 1). A cyst was found adherent to bladder. Organised parietal peritoneum over cyst dissected by blunt dissection. Cyst ruptured spontaneously, purulent material drained and sent for cytology. Three pieces gauze removed from within the cyst with multiple small fragments of cotton and gauze (Figure 2).

The sample was sent for histopathological examination. Post-operative period was uneventful.

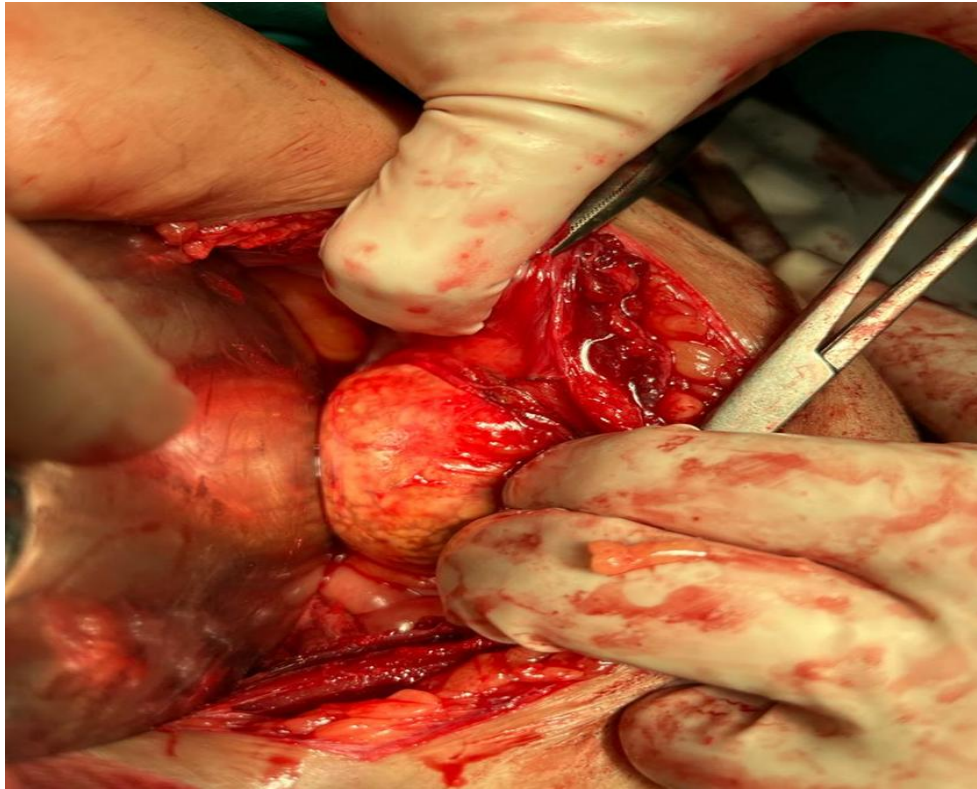


Figure 1

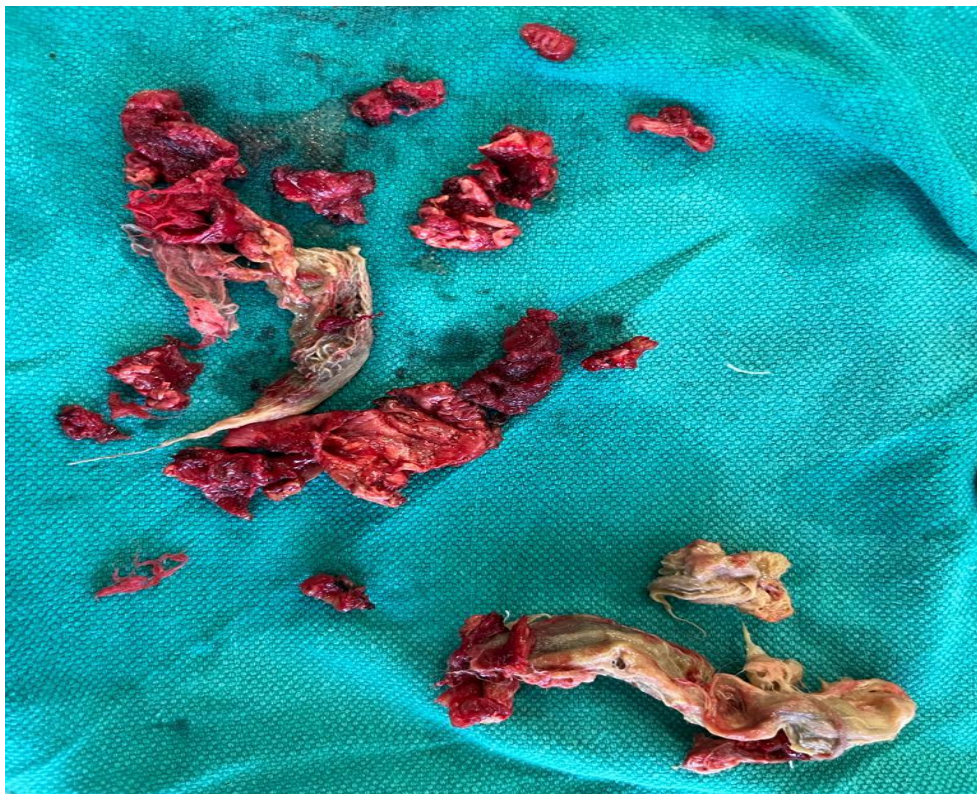


Figure 2

3. Discussion

Gossypiboma may manifest at any time, from a few weeks to several years.

There are two types of reaction seen in response to retained surgical foreign bodies.

In the first one, an abscess may form with or without a secondary bacterial infection.

The second type of reaction is an aseptic fibrinous response, resulting in tissue adhesions and encapsulation and eventually foreign body granuloma.

The presentation of gossypiboma may either be pseudotumoral, occlusive, or septic.³

The complaints are those of non-specific abdominal pain, nausea, vomiting, and abdominal distension, rectal bleeding, altered bowel habit, fever, anorexia, weight loss, malabsorption syndrome, or a palpable mass. Sometimes due to peritonitis severe pain may occur. About a third of gossypiboma patients remain asymptomatic. Occasionally, symptoms may arise from obstruction, external fistulae or non-healing infection of the surgical wound. These complications may lead to death with the death incidence ranging from 15 to 22%⁴

In our case a retained sponge caused a foreign body reaction to form a foreign granuloma, which mimicked as an ovarian mass or cyst.

Usually, it is not easy to diagnose gossypiboma on the sole basis of clinical features, so knowledge of imaging features of gossypiboma is necessary. It depends upon the site and position of foreign body. Various imaging methods such as x-ray, ultrasonography (US), CT, magnetic resonance imaging (MRI).

In spite of proper history, detailed physical examination, laboratory and radiographical investigations, usually gossypibomas are not suspected and are often misdiagnosed as tumour. Gossypiboma remain an accidental finding. A similar situation occurred in our case.

Gossypiboma is best removed by open surgery even though laparoscopic and percutaneous removal have been reported in a few selected cases.

4. Prevention

As with many other medical problems, prevention is better than cure for gossypiboma. Four separate counts are recommended, firstly, when instruments and sponges are first unpackaged and set up; secondly, before the beginning of the surgical procedure; thirdly, as closure begins; and at last, a final count is made during final skin closure.

5. Conclusion

Gossypiboma occurs most commonly after intra-abdominal operations. Women are at increased risk due to obstetric and gynaecological operations

Gossypiboma is a term meaning gauze or cotton material inadvertently left in the body after surgery. It occurs most commonly after intra-abdominal surgery but can occur after many other types of surgery. It may be silent for a long time before manifesting and so cause diagnostic dilemma

Any patient presenting postoperatively with infection, pain, or palpable mass in the abdomen, the possibility of retained foreign body should always be ruled out. Strict monitoring of the mop and surgical sponge count should be practiced to prevent gossypiboma.

References

- [1] El Fortia M, Bendaoud M, Sethi S (2008) Abdominal Gossypiboma (Textilloma). The Internet Journal of Radiology.
- [2] Topal U, Gebitekin C, Tuncel E. Intrathoracic gossypiboma. AJR Am J Roentgenol 2001; 177: 1485–6
- [3] Kim CK, Park BK, Ha H. Gossypiboma in abdomen and pelvis: MRI findings in four patients. AJR 2007; 189: 814–817
- [4] Rajput A, Loud PA, Gibbs JF, Kraybill WG. Gossypiboma (foreign body) manifesting 30 years after laparotomy. J Clin Oncol 2003; 21: 3700–1