CASE REPORT

Gossypiboma: After 13 Years of a Gynecologic Procedure—Masquerading as an Ovarian Tumor

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Introduction

Gossypiboma, also known as textiloma or cottonoid, is a term used to describe a mass in the body, which comprises retained surgical sponge and reactive tissue [1]. In the literature, there are some cases reporting gossypiboma mimicking gastrointestinal stromal tumors or thoracic masses, but it is rare in gynecologic tumors [2]. The treatment option is usually laparotomy due to the possibility of adhesion formation, depending on the previous surgeries. However, by advancements in minimally invasive surgery techniques, the laparoscopic approach is associated with many advantages in gynecologic operations [3].

In this article, we report a woman with pelvic gossypiboma that was mimicking a remnant ovarian malignancy and its successful management by laparoscopy.

Case Report

A 63-year-old, gravida 7, para 3 woman—who had undergone a total abdominal hysterectomy and bilaterally salphingo-ooforectomy 13 years ago because of uterine fibroid—got admitted to our outpatient clinic with pelvic pain accounting for 3 months. The patient had no medical records showing the details of her previous surgery. A firm, round, 4-cm mass was seen in the right pelvic cavity by means of transvaginal ultrasound. Serum tumor markers were within the normal limits. Further, abdominal CT (Fig. 1) revealed a 44 × 43 mm well-defined pelvic mass with peripheral linear calcific radioopacity in the right pelvis. A diagnosis of semisolid mass arising from ovarian remnant was made by radiologists. Thereafter, a diagnostic laparoscopy was performed. Cecum and appendix were adhered to the mass, and we were unable to see a separate ovarian tissue. General surgeons were called for per-operative consultation for consideration of any bowel malignancy. By means of sharp dissection, the cecum and bowel loops were carefully separated. A gauze, covered with abscess, was seen through the mass (Fig. 2). The gauze was removed by means of an endobag. She was discharged on the second day of her surgery.

Discussion

The incidence of gossypiboma is difficult to evaluate. It varies between 1 in 100 and 1 in 5,000 procedures [1].

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Fig. 1 Abdominal CT showing right pelvic mass with peripheral linear calcifications

Fig. 2 Laparoscopic removal of the gauze covered by abscess

However, surgeons may not report these events for fear of medico-legal issues; therefore, actual incidence rate will never be known. Gossypiboma most commonly occurs in upper abdominal surgery and gynecology procedures [1]. Swabs, packs, towels, or instruments may be left in the body cavities after the surgeries [4]. Gawande et al. [4] found surgical sponge in 69 % of the cases and instruments such as clamp, retractor, and electrode in 31 % of the cases. Several risk factors have been reported including an emergency operation, long operation times, hurried sponge counts, inexperienced staff, and obesity of patients [4]. In our patient, body mass index was within normal limit, but we had no further information about the previous procedure because of lack of the medical records.

Clinical symptoms of gossypiboma vary as; mild discomfort, pain, vomiting, fever, bowel obstruction, and fistula formation and can present many years after the initial surgery [4]. Pathologically, a retained gauze may lead to an exudative reaction leading to abscess formation or chronic internal or external fistula formation, and an aseptic fibrinous reaction resulting in adhesion and granuloma formation. They usually remain asymptomatic or present with pseudotumor syndrome, as in our case [1].

The gossypibomas are usually diagnosed by means of imaging studies and a high index of suspicion. The ultrasound feature is usually a well-defined mass containing wavy internal echogenic focus with a hypoechoic rim and a strong posterior shadow [1]. On CT, a gossypiboma may be detected as a cystic lesion with internal spongiform appearance with mottled shadows as bubbles, hyperdense capsule, concentric layering, or mottled mural calcifications.

When the diagnosis of gossypiboma is made, removal of the retained sponge is recommended through surgical, endoscopic, or laparoscopic method to prevent severe complications that may lead to death (15–22 %) or morbidity [1]. There have been some reports on laparoscopic removal of foreign bodies such as malleable retractor, intrauterine device, sponge, and gauze pad [3, 4]. In this case, we had the facility of equipped endoscopic surgery room and the support of general surgeons with us. These facilities enabled the operation to be finished laparoscopically.

For preventing those unwilling cases, the small sponges should not be used during laparotomy, and compressors should only be used intraperitoneally mounted on a forceps. Surgeons should also perform a brief postoperative wound-and-cavity exploration before wound closure to prevent the risk of gossypiboma.

Conflict of interest We declare that we have no conflict of interest.

References

1. Sun HS, Chen SL, Kuo CC, et al. Gossypiboma—retained surgical sponge. *J Chin Med Assoc.* 2007;70(11):511–3.
2. Nemati MH. Mediastinal gossypiboma simulating a malignant tumour. *Interact Cardiovasc Thorac Surg.* 2012;1–3. doi: [10.1093/icvts/ivs376](https://doi.org/10.1093/icvts/ivs376).
3. Mousavi-bahar SH, Amirzargar MA. Laparoscopic removal of retained surgical gauze. *Urol J.* 2010;7:203–5.
4. Sharifiaghdas F, Mohammad Ali Beigi F, et al. Laparoscopic removal of a migrated intrauterine device. *Urol J.* 2007;4:177–9.