MedCrave
Step into the World of Research

Obstetrics & Gynecology International Journal

Case Report

Open Access

CrossMark

Gossypiboma mimicking as ovarian tumor¬-a rare case report

Abstract

Gossypibomas or Textiloma can often present, clinically or radiologically, similar to tumors and abscesses, with widely variable complications and manifestations, making diagnosis difficult and causing significant patient morbidity. Gossypiboma should be removed as soon as diagnosed. Surgery either by laparoscopy or laparotomy is the treatment of choice especially in cases with deeply located foreign body or fistulas.

Keywords: Gossypiboma, Textiloma, Ovarian tumor

Volume 5 Issue 2 - 2016

Rekha Ratnani
Chandulal Chandrakar Memorial Medical College, India

Correspondence: Rekha Ratnani, Associate professor & Unit head, Chandulal Chandrakar Memorial Medical College, Surya Vihar, Junwani road, Bhilai (CG) 490020,
Email rekharatnani@gmail.com

Received: April 29, 2016 | **Published:** September 02, 2016

Introduction

Gossypiboma, textiloma or more broadly Retained Foreign Object (RFO) is the technical term for retained gauze or mop left inside the patient's body mistakenly, leading to formation of a tumor which can be secondary to foreign body reaction or manifestation of a long standing chronic abscess. The tumor formed is basically a pseudo-tumor which is end result of inflammatory reaction in response to foreign body and not due to abnormal growth of tissue. It is a rare complication of surgery first reported in 1884 by Wilson, but carries severe consequences for both patients and surgeons in terms of morbidity, mortality and medico-legal procedures. According to various publications, its incidence varies from 1/833 to 1/32. The incidence is higher in obese patients and patients with normal body mass index, if taken for emergency abdominal surgeries in hospitals with heavy patient load.[1]

The occurrence of gossypiboma may not be very common but still it should be kept as differential diagnoses in patients reporting with symptoms of mechanical obstruction or lump in abdomen especially with past surgical history.[1] Clinical presentation depends on the foreign body reaction which may be either exudative or aseptic. Exudative reaction usually occurs due to granuloma formation around the surgical gauze or mop which may overtly present as abscess secondary to bacterial infection. Aseptic reaction leads to formation of pseudocapsule around the surgical gauze and adhesion formation with the surrounding structures which may present later as symptomatic pelvic lump. Serious complications can be perforation, mechanical obstruction, peritonitis, septicemia and even death. Pelvic lump secondary to retained gauze can mimic as ovarian tumor.

Case Report

Since the first case was reported in 1884 by Wilson, hundreds of cases have been reported. We report the case of an abdominal textiloma in a 28 year old village woman para 3, who underwent tubectomy operation four years back. She was asymptomatic throughout except for the abdominal lump which she noticed four months back which was associated with pain in abdomen for the past two months. There was no history of fever, bowel or bladder disturbances and her periods were regular with average flow and not associated with pain. She was of average built with mild pallor. On per abdomen examination small suprapubic transverse scar was seen and a 24 week size lump was palpable, firm in consistency, slightly mobile side to side with lower pole not reachable. On per speculum examination cervix and vagina were healthy. Per vaginum examination revealed normal sized uterus and same lump was felt through right fornix separately from the uterus. Provisional diagnosis of ovarian mass was made and further investigations ordered. Her ultrasonography further confirmed the diagnosis of ovarian mass with no abnormality on color doppler and her CA-125 was in the normal range. She was taken for exploratory laparotomy .On giving nick in the peritoneum, pus came out and immediately suction cannula was introduced and about 1.5 litres of pus was drained. The incision was then extended and to our surprise a big sac was visible with some gauze like material. Gently we pulled it out and it turned out to be a big surgical mop. The sac was thick walled forming dense adhesions with surrounding gut and occupying the entire lower abdomen. It was separated with sharp dissection from the surrounding structures completely along with the base which was adhered at the right tubal lump. The uterus and both ovaries were normal. After thorough lavage, abdomen was closed in layers after the count of instruments and mop was checked and found to be normal. Post op recovery was fast and uneventful. Pus culture report was sterile and she was discharged on eighth day.

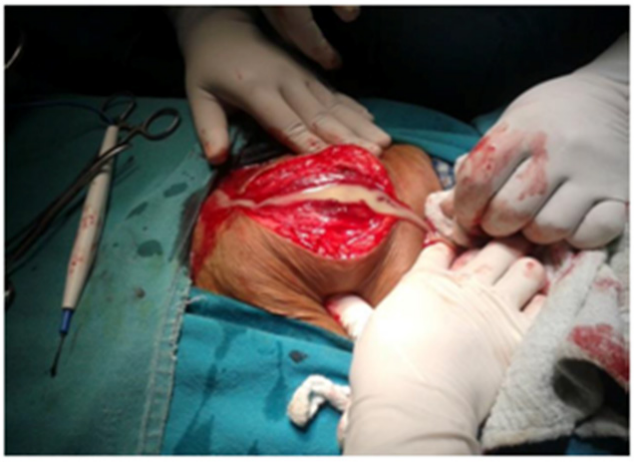

Figure 1 Showing pus escaping from the mass.

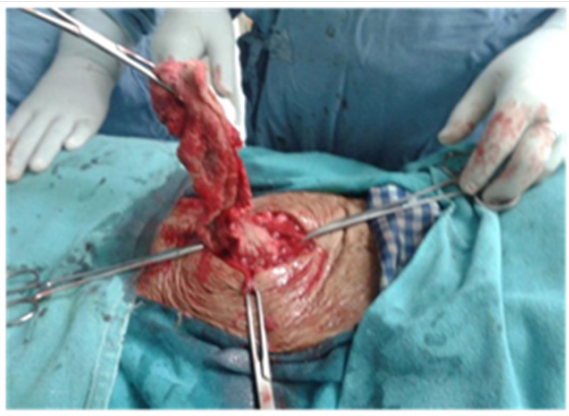

Figure 2 Showing mop being extracted from the mass.

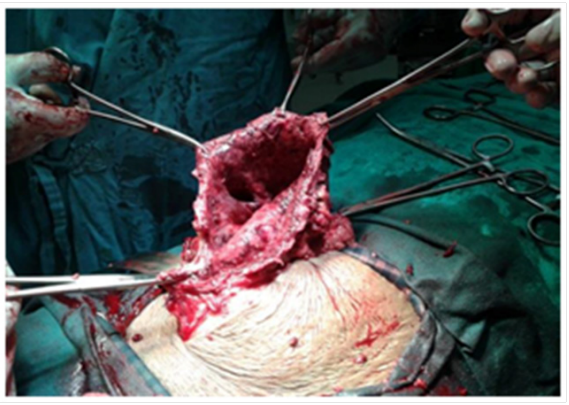

Figure 3 Showing foreign body granuloma.

Discussion

The term "gossypiboma" is a Latin word 'gossypium' which means cotton and the suffix -oma, means a tumor. It is described as a mass inside a patient's body made of cotton matrix and surrounded by a granuloma secondary to foreign body reaction[1]. Many a times "Textiloma" is used as synonym to describe the same, as surgical sponges are also made of synthetic cloth. In this case report, the patient came with a painless lump of 24 weeks with lower pole not reachable on palpation and felt separately from the uterus during vaginal examination so the diagnosis of ovarian lump was made. Although ultrasonography is a good diagnostic tool for diagnosing pelvic masses it failed to identify the retained gauze and reported it as ovarian mass in this case. CT scan and MRI demonstrate a sensitivity and specificity of 100% and 94%, respectively in the evaluation of ovarian mass due very clear anatomical delineation but it was not performed in this case due to monetary constraints.[2] Ovarian lumps are usually asymptomatic and reported at a later stage due to distension of abdomen or mechanical obstruction hence the primary diagnosis of ovarian tumor was made in this case. Gossypiboma being a rare entity and with no past surgical records available, it was easily missed as preoperative diagnosis. Apart from presenting as lump these retained intra abdominal gauzes can migrate into any part of the gastro intestinal lumen like ileum, colon, stomach or even bladder and can cause complete or partial obstruction. Two major types of reaction occurring in response to retained surgical gauze can lead to abscess formation with or without a secondary bacterial infection and an aseptic response resulting in encapsulation of the retained gauze and adhesion formation.[3] In this case both the things were present. On opening up the mass 1.5 litres of pus escaped which suggests abscess formation in response to retained mop. Also it was well encapsulated and densely adhered to surrounding structures. Gossypiboma may remain asymptomatic for long periods of time, sometimes months or years following surgery.[4] In this case also, patient was asymptomatic for many years post surgery and lump associated with pain was recently noticed.

Gossypiboma should be removed as soon as diagnosed. Decision to take the patient for laparotomy in this case was taken with the provisional diagnosis of ovarian tumor and it remains the treatment of choice for gossypiboma also. Hence management plan in this case was not compromised in absence of MRI. To prevent gossypiboma, sponges are counted by hand before and after surgeries as a protocol all over the world. This method was codified into recommended guidelines in the 1970s by the Association of perioperative Registered Nurses (AORN).[5] Ideally four separate counts are recommended: the first when instruments and sponges are first unpackaged and set up, a second before the beginning of the surgical procedure, a third as closure begins, and a final count during final skin closure.[5]

Conclusion

Gossypiboma or Textiloma can often present, clinically or radiologically, similar to tumors and abscesses, with widely variable complications and manifestations, making diagnosis difficult and causing significant patient morbidity. Ovarian lumps can mimic asymptomatic retained gossypibomas. Whenever in doubt, help of various diagnostic modalities should be taken. All surgeries should be dealt with lot of caution. After completion of the procedure, surgeon should not be in haste and should personally count the instruments prior to the surgery and before closure. Rule of four count should be strictly followed in all the surgeries. Any lump with history of surgery should be thoroughly investigated. Whenever in doubt, plain x ray abdomen along with ultrasonography, CT scan and MRI should be done to confirm the diagnosis if facility is available.[6] Post operative complaints of patients should always be taken seriously. Good documentation and operative notes with intraoperative events should always be mentioned in discharge card. Cooperation of surgical team especially scrub staff for exact counting of all instruments and gauzes before the start of surgery and after ending the operation helps in preventing such complications. Whenever in doubt help of radiologic screening should be taken before discharging the patient. Awareness about this entity and vigilance during surgery can prevent patient morbidity and decrease litigations against the surgeon.

Acknowledgments

None.

Conflicts of interest

None.

References

1. Sharma D, Pratap A, Tandon A, et al. Unconsidered cause of bowel obstruction – gossypiboma. *Can J Surg*. 2008;51(2):e34-e35.
2. Iyer VR, Lee SI. MRI, CT, and PET/CT for ovarian cancer detection and adnexal lesion characterization. *AJR Am J Roentgenol*. 2010;194(2):311-321.
3. Grassi N, Cipolla C, Torcivia A, et al. Trans-visceral migration of retained surgical gauze as a cause of intestinal obstruction: a case report. *J Med Case Reports*. 2008;2:17.

4. Dakubo J, Clegg-Lamptey JN, Hodasi WM, et al. An Intra-Abdominal Gossypiboma. *Ghana Med J*. 2009;43(1):43-45.

5. Mefire AC, Tchounzou R, Guifo ML et al. Retained sponge after abdominal surgery: experience from a third world country. *Pan African Med J*. 2009;2:10.

6. Garg Monika, Aggarwal Akash Deep. A Review of Medicolegal Consequences of Gossypiboma:*J Indian Acad Forensic Med*. 2010;32(4):358-361.

7. Iyer VR, Lee SI. MRI, CT, and PET/CT for ovarian cancer detection and adnexal lesion characterization. *AJR Am J Roentgenol*. 2010;194(2):311-321.