# Forget Me Not - Gossypiboma in Pregnancy: Report of a Case

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#### **Abstract**

Forgotten foreign bodies, which present as Gossypiboma (Latin, Gossypium = cotton; Kiswahili, boma = place of concealment) are frequently misdiagnosed as tumors. This is an important operative, iatrogenic complication that is preventable. Gossypibomas have serious surgical and medicolegal consequences. A case of Gossypiboma in a pregnant lady, which resembled an ovarian mass, is discussed herein with review of the literature.

#### INTRODUCTION

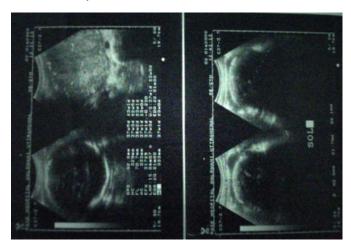
Gossypiboma is an infrequent, unwanted and avoidable complication in surgery. It can lead to serious morbidity and mortality. It is not anticipated and is frequently misdiagnosed. It carries an important medicolegal aspect for every surgeon. A case of forgotten surgical sponge after cholecystectomy presenting as an ovarian tumor during pregnancy is described here.

## **CASE REPORT**

A 25-year-old primigravida with 34 weeks of gestation was referred from the department of Gynecology and Obstetrics for a lump in the abdomen, which was detected on routine antenatal ultrasound examination for fetal well-being. She had undergone an open cholecystectomy two years back at another hospital. Following surgery she had reported to the surgeon for abdominal pain and fever, which was managed on medication, meanwhile she got married. Her physical examination revealed a spherical, mobile, non-tender, firm mass in the right hypochondrium by the side of the gravid uterus. Ultrasonography of the abdomen revealed a large, 105 x 105mm, hypoechoic fluid-containing cystic mass in the right lateral position of the fundus of the gravid uterus with a normal intrauterine fetus. The mass was suggestive of a dermoid cyst of the ovary (Figure 1).

Figure 1

Figure 1: Ultrasound of the abdomen showing a gravid uterus and a cystic mass.



Elective lower-segment caesarian section was done after 38 weeks on EDD. A healthy male infant was delivered. Exploration for the mass revealed a pseudotumor containing purulent material attached to the mesentery of the small bowel with tough adhesions; the tumor was dissected out of the mesentery. On opening the cyst, a surgical sponge along with pus was found (Figure 2 & Figure 3).

**Figure 2**Figure 2: Pseudocyst containing a surgical sponge and pus



**Figure 3**: Surgical sponge and pseudocyst.



Histopathology was consistent with gossypiboma and the pus was sterile. The postoperative period was uneventful and the patient was discharged on the seventh postoperative day.

## **DISCUSSION**

There are numerous case reports of retained foreign bodies in the literature, but the true incidence is thought to be under-reported secondary to the possible medicological consequences of this iatrogenic complication. Despite precautions taken before, during and after the surgical procedures, objects are still occasionally left behind in the peritoneal cavity.

The actual incidence of retained surgical sponges is difficult to estimate but has been reported to be one in every 3000

procedures<sub>1</sub>. This inadvertent complication most commonly occurs after gynecological and upper abdominal surgeries<sub>12</sub>. Surgical sponge is the most commonly forgotten foreign body<sub>3</sub>. In upper abdominal surgeries, it is reported mostly after open cholecystectomy<sub>4</sub>. The deepness of the operating field facilitates the disappearance of a blood-soaked gauze or sponge under the retractors<sub>5</sub>. A cotton sponge, although clinically inert, may serve as a nidus for catastrophic complications. Patients may present acutely or in a delayed fashion, as the foreign body evokes two types of reactions: One is an aseptic fibrinous response that creates adhesions and encapsulations resulting in a granuloma or pseudotumor formation (gossypiboma)<sub>67</sub>. The other one is an exudative septic response leading to abscess, fistulae, perforation, erosion, extrusion and obstruction.

The pre-operative diagnosis of gossypiboma is difficult; it requires skill and experience in analysis of the investigations<sub>8</sub>. The interval between the operation and development of symptoms varies from a few days to many years<sub>1</sub>. The radiological appearance of a retained sponge varies and is non-specific; a correct diagnosis is made in about one third of cases only<sub>9</sub>. Altogether, even based on history, physical examination, laboratory and radiological findings, usually gossypibomas are not suspected and remain accidental preoperative or postoperative findings. Often the presumptive diagnosis is that of a tumor as in our case. To our knowledge only one case of gossypiboma in pregnancy has been reported in literature where the retained surgical sponge mimicked an ovarian tumor<sub>10</sub>.

The case of a retained sponge or instrument raises the issue of human fallibility. There is a growing body of literature analyzing human factors in the study and prevention of medical accidents. It has been found that interpersonal and communication issues are responsible for many inefficiencies, errors and frustration in psychologically and organizationally complex environments like operation theater. Despite all advancements, human fallibility remains and so does the possibility of gossypiboma. The importance of correct sponge and instrument counts cannot be overstated. A thorough exploration of wound and cavity with patience before wound closure should be in the habit of every surgeon. Sponge and swabs with radio-opaque markers are of help in diagnosis.

Gossypiboma is an unwanted and avoidable medical error. It should be considered in differential diagnosis of any postoperative patient presenting with an abdominal mass

lesion.

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#### References

- 1. Botet Del Castillo FX, López S, Reyes G, Salvador R, Llauradó JM, Peñalva F, et al. Diagnosis of retained abdominal gauze swabs. British Journal of Surgery 1995:82:227-8.
- 2. Wig JD, Goenka MK, Suri S, Sudhakar PJ, Vaiphei K. Retained surgical sponge: Gossypiboma. Australasian Radiology 1997;41:288-291.
- 3. Dhillon JS, Park A. Transmural migration of a retained laparotomy sponge. Am Surg 2002;68:603-5.

- 4. Dux M , Ganten M, Lubienski A, Grenacher L. Retained surgical sponge with migration into duodenum and persistent duodenal fistula. Eur Radiol 2002;12(Suppl.3):S74-7.
- 5. Serra J, Matias-Guiu X, Calabuig R, Garcia P, Sancho FJ, La Calle JP. Surgical gauze pseudotumour. Am J Surg 1998;155:235-7.
- 6. Prasad S, Krishnan A, Limdi J, Patankar T. Imaging features of gossypiboma: Report of two cases. J Postgrad Med 1999;45:18-19.
- 7. Sahin-Akyar G, Yagci C, Aytac S. Pseudotumour due to surgical sponge: Gossypiboma. Australasian Radiology 1997;41:288-291.
- 8. Golzalez-Ojeda AA. Retained foreign bodies following intra-abdominal surgery. Hepato-Gastroenterology, 1999:46:808-12.
- 9. Kopka L, Frische U, Gross AJ, Funke M, Oestamann JW, Grabbe E. CT of retained surgical sponges (textilomas): pitfalls in detection and evaluation. J Comput Assist Tomogr 1996;20:919-23.
- 10. Cem Dane, Murat Yayla, Banu Dane. A foreign body (gossypiboma) in pregnancy: first report of a case. Gynecol Surg 2006;3:130-131.

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