

A Foreign Body (Gossypiboma) in Pregnancy: Report of the First Case in the Pregnancy

Cem DANE, Murat YAYLA, Banu DANE, Ahmet ÇETİN

İstanbul-Turkey

Gossypiboma is a rare tumor caused by gauze fibers retained during surgery. To our knowledge, a gossypiboma in the abdomen in pregnancy has not been previously reported in the literature. A 27-year-old woman at 38 weeks of gestation was presented with adnexial mass. A caesarean delivery had been performed 5 years ago. Obstetrics ultrasonography showed thick curvilinear hyper echoic band with distal acoustic shadowing in the pubic region. In caesarean section, a well-encapsulated, brownish soft-tissue tumor containing serous fluid was discovered in the central cavity, shown at histological investigation to be gauze fibers. The frequency incidence is not very well known; however general estimation is 1 in 1000 to 15000 for intra-abdominal operations. The best prevention of this condition can be achieved by meticulous count of surgical materials and also by routine use of surgical textile materials impregnated with a radio-opaque marker.

(Gynecol Obstet Reprod Med 2006; 12:141-142)

Key Words: Gossypiboma, Retained surgical sponges, Pregnancy

The technical name for a surgical sponge left within the body of a patient is inadvertent "gossypiboma." The word is derived from Latin word *Gossypium* for cotton and from the Kiswahili word *boma* for "place of concealment". These retained sponges first were seen as a "textilomas", but "gossypiboma" in 1978 were renamed.¹ The first case was reported by Wilson in 1884.² These rarely are retrieved in the literature, because of the legal complications. A higher incidence of retained laparotomy sponges has been reported in association with gynecological procedures. We report a case of gossypiboma in the pregnancy of the 38th weeks that imitated an ovary neoplasm.

Case Report

A 27-year-old woman (G2P1) presented with abdominal pain at 38 weeks gestational age. Her medical history includes a caesarean section five years before at another hospital. The patient had presented initially 4 weeks following the Caesarean section with abdominal pain and a pelvic ultrasound at that time was normal. On examination, she had a mobile obvious firm, non-tender mass in the suprapubic area. During ultrasonography, an echoic mass surrounded by irregular hyperechoic areas and normal fetal anatomy in accordance with pregnancy was detected. A 2900 g healthy male infant with an Apgar score of 9 at 38 weeks of gestation was delivered. At the cesarean operation, a piece of retained surgical towel was taken out and was seen surrounded by purulent material and the pseudo-capsule formed by the

Division of Perinatology, Department of Gynecology and Obstetrics, Haseki Education and Research Hospital, Istanbul, Turkey

Address of Correspondence

Cem Dane

Emlakbank Blokları B: 1 D 12

Vatan caddesi Fatih, İstanbul

Submitted for Publication: 03.11.2005

Accepted for Publication: 04.02.2006

granulation tissue (Figure 1). The abscess cavity was irrigated. Pathologic evaluation confirmed the presence of foreign body accordance with a sponge with surrounding inflammation and fibrosis. The patient made an uneventful recovery and was discharged home on the fifth postoperative day. At the follow-up two years after operation, the patient felt good and was completely recovered.



Figure 1. Retained laparotomy towel in cesarean section

Discussion

Gossypibomas most generally occur following abdominal and gynecological surgery. Although the true incidence is unknown, it was reported as 1 in 100 to 3000 for all surgical interventions and 1 in 1000 to 15000 for intraabdominal operations.³ The surgical gauze has made out of cotton, which is rather inert and no specific biochemical reaction stimulates. When left in the body cavity, surgical sponges can create two types of foreign body reaction. The first type of response is exudative, with the resultant formation of an abscess with or without bacterial invasion. This reaction usually causes related clinical symptoms and signs shortly after surgery. The second type of response is aseptic with

extensive adhesions and encapsulations resulting in a foreign body granuloma.⁴ The septic complications are likely to present during the postoperative time early, whereas the aseptic encapsulations can disappear during years, as in this case here. The time between initial and repeated surgery varies from a few days to 20 years. Circumstances reported to explain operative loss of sponges are emergencies, urgency and hemorrhagic procedures, unexpected changes in the operation, time-consuming operations and large body habitus, operations in anatomic regions difficult to reach.⁵ The dispatched accounts, which can occur long procedures, can also contribute and additional accounts are recommended when there are changes of the personnel of the theatre. The majority of the reported cases of gossypiboma occur in the presence of a normal account of package. The examination of the operative notes of the Caesarean and the discussion with the original surgeon, in this case, did not indicate why or how a package was maintained. Probably, a package was used during closing and then not documented in the final account. The gossypibomas generally are not suspected and remain an accidental peroperative or postoperative finding. Treatment consists of thorough surgical exploration of the abdomen, removal of the gossypiboma, drainage of purulent fluid.

To our knowledge, our case was the first gossypiboma of term pregnancy in the literature. The prevention of the gossypiboma is better than the treatment. The current use of the surgical materials of textile soaked with radiopaque mar-

kers which are easily detected by the intraoperative radiological sifting when the account is suspicious.⁵

Counting sponges at the beginning of the operation, at closure of the peritoneum, and after wound dressing forms part of this attitude. Small sponges should not be used during laparotomy. Compresses should be used only intraperitoneally, one by one, mounted on a forceps. Before closing the peritoneum, the surgeon should explore the complete abdominal cavity; sponges should not be used to facilitate closure.

References

1. Williams RG, Bragg DG, Nelson JA. Gossypiboma-the problem of the retained surgical sponge. *Radiology* 1978; 129:323-6.
2. Le Ne'el, J.C, De Cussac, J.B, Dupas, B., Letessier, E, Borde, L., Eloufir, M. Textilomas: a matter of 25 cases and review of the literature. *Chirurgie* 1994; 120:272.
3. Gawande AA, Studdert DM, Orav EJ, Brennan TA, Zinner MJ. Risk factors for retained instruments and sponges after surgery. *N Engl J Med* 2003; 348:229-35.
4. Lauwers PR, Van Hee RH. Intraperitoneal gossypibomas: the need to count sponges. *World J Surg* 2000; 24:521-7.
5. Rajagopal A, Martin J. Gossypiboma-"a surgeon's legacy": report of a case and review of the literature. *Dis Colon Rectum* 2002; 45:119-20.