Scholars Journal of Medical Case Reports **ISSN 2347-6559 (Online)**
Sch J Med Case Rep 2015; 3(8A):770-772 **ISSN 2347-9507 (Print)**

(An International Publisher for Academic and Scientific Resources) DOI: 10.36347/sjmcr.2015.v03i08.037

Textiloma following caesarean section –A dreaded complication

Dr. Anuja Sinha[1], Dr. Rajesh Nair[2], Dr. Nawin Kumar[3], Dr. Amit Kumar[2]
[1]Assistant Professor, Department of Anatomy,
[2]Senior Resident, Department of General Surgery
[3]Associate Professor,
Kasturba Medical College, Manipal University, Manipal, Karnataka, India

***Corresponding author**
Dr. Rajesh Nair
Email: rajeshnair39@yahoo.com

Abstract: Here we discuss the case of an abdominal textiloma in a 29-year old lady who underwent a caesarean section at another hospital. She presented to the triage with fever, persistent abdominal pain and a palpable abdominal mass, 3 weeks after her caesarean. Ultrasonography of the abdomen revealeda retained sponge in the abdominal cavity. Exploratory laparotomy revealed a surgical mop surrounded by purulent material. The post-operative course was uneventful and the patient was discharged on the 14th post-operative day after suture removal.
Keywords: Textilomaa .k.a gauzeoma, Ultrasonography, laparotomy.

INTRODUCTION

Textilomaa. k. agauzeoma, cottonoid, muslinoma, or gossypiboma is a rare but preventable surgical complication following laparotomy. It is defined as the inadvertent retention of a textile foreign body, during a surgical procedure, followed by a foreign-body reaction.

CASE REPORT

A 29-year-old lady presented with worsening abdominal pain and fever, post caesarean section done 3 weeks back, at another hospital. Vital signs were normal. Abdominal examination revealed a tender, vaguely palpable abdominal mass in the right iliac fossa. Blood investigations revealed leucocytosis with left shift. Ultrasonography of the abdomen revealed a laminated internal structure with strong posterior acoustic shadow within an abscess cavity. With the history of recent caesarean section the probability of retained foreign body was considered.

Patient underwent laparotomy via a lower midline incision (Figure 1). Textiloma was confirmed and retrieved successfully from the right iliac fossa without further complications (Figure 2). She remained asymptomatic at 12-months follow-up.

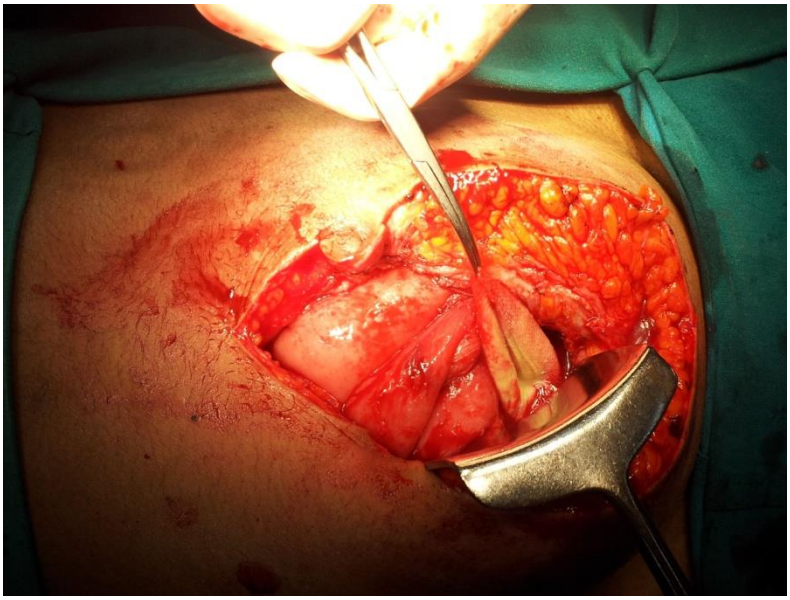

Fig 1: Laparotomy revealed surgical sponge in right iliac fossa.

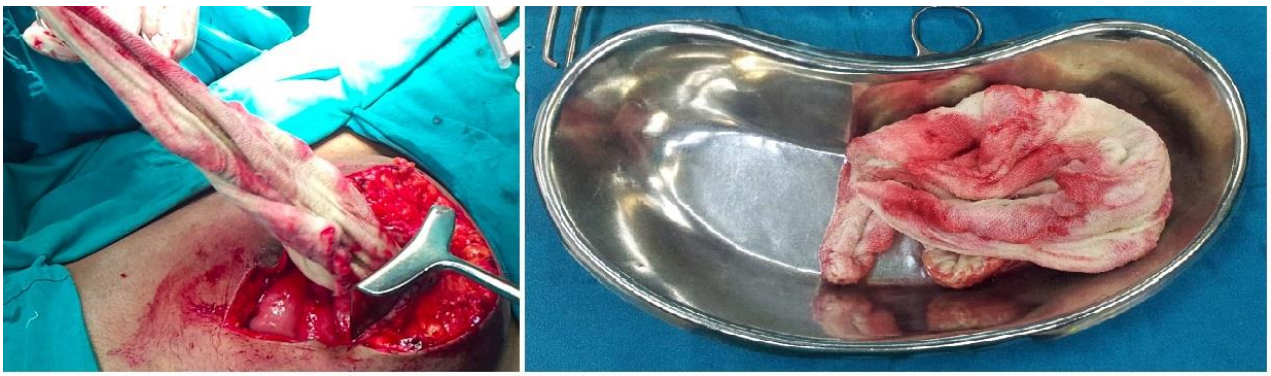

Fig-2: The surgical sponge removed completely

DISCUSSION

The first case of retained foreign body (RFB) was described in 1884 [1] with an incidence varying from 0.01% to 0.001% [2]. The actual incidence is difficult to determine, as it is an under-reported condition due to fear of possible legal repercussions and litigations. Retained foreign body (RFB) includes a variety of materials such as needles, surgical instruments, towels and surgical sponges. A surgical sponge is the most prevalent type of retained foreign body (RFB) and make up 45-80% of the reported cases [3]. Recently, due to the increasing availability of synthetic textile in place of cotton the word "Textiloma" (textilis Latin: weave, oma Greek: tumor) is being used in place of older names such as gossypiboma (Gossypium Latin: cotton, cotton wool; Boma Swahili: place of concealment), gauzeoma, cottonoid, or muslinoma[1]. Most common site for RFB is intra-abdominal cavity following abdominal operations such as appendectomy, cholecystectomy and gynaecological surgery however; it has been described in paraspinal muscles, spinal, intrathoracic and pericardial spaces and even in the extremities.

The sponge made up of cotton is an inert material and does not undergo decomposition in the body tissue, however it induces two types of body responses. First is an exudative inflammatory reaction with abscess and/or granuloma formation. This leads to early detection and surgical removal. Chronic foreign body granulomatous type is an aseptic fibrinous response to the cotton matrix followed by development of tissue adhesion formation and encapsulation [4]. Patient may remain asymptomatic for a long period of time, sometimes months or years following surgery.

Plain abdominal radiography may show soft tissue mass or curvilinear radio opaque barium-impregnated threads [5]. Sometime gas trapped inside the fibres of sponge can give rise to whorl-like appearance. Ultrasound of retained surgical sponges usually shows well-defined complex mass containing echogenic wavy structures with hypo echoic rim and strong acoustic shadowing posteriorly [6]. On CT scan, a textiloma may manifest as a rounded cystic mass with a dense central part and hyper dense capsule. Other features include a whorl-like pattern with spongiform gas, cystic masses with concentric layering, mottled shadows as bubbles and mottled mural calcifications [3, 7].

MRI features can be confusing because the radiopaque marker is neither magnetic nor paramagnetic so it may not be visible. MRI would show a mass with variable signal intensity, which depends on the amount of fluid and protein. T1-weighted images would typically show a well-defined hypo intense lesion and T2-weighted hyper intensity with wavy, folded fabric with a striped or spotted appearance [8].

A landmark article published in NEJM described several risk factors leading to retained foreign body however only 3 of them had significant p value to mandate any importance. They were emergency surgery, unexpected change in the surgery and large body habitus [9].

The surgical removal of RFB should be performed once textiloma is diagnosed. Usually extraction is done by laparotomy but alternative methods such as endoscopic or laparoscopic approaches may be considered [10]. Plain X-ray films after surgery can be single powerful tool to avoid this unwanted complication. Surgical instrument and sponge counts are routine methods but can be subjected to human error. Thus several types of technologies have been recommended at the end of high-risk cases. Mainly two types of "radiographic screening" are in use at present. The electronic article surveillance (EAS) system uses special tags fixed to surgical sponges and a radiofrequency identification (RFID) system, which uses a microchip tagged sponge and hand held barcode scanners [11].

REFERENCES

1. Kim HS, Chung TS, Suh SH, Kim SY; MR imaging findings of paravertebral gossypiboma. Am J Neuroradiol, 2007; 28(4): 709-13.
2. Sümer A, Çarparlar MA, Uslukaya Ö; Gossypiboma: Retained Surgical Sponge after a Gynaecologic Procedure. Case Rep Med 2010; 917626: 3.

3. Kopka L, Fischer U, Gross AJ, Funke M; CT of retained surgical sponges (textilomas): pitfalls in detection and evaluation. J Comput Assist Tomogr, 1996; 20(6): 919-23.
4. Wan W, Le T, Riskin L, Macario A; Improving safety in the operating room: a systematic literature review of retained surgical sponges. Curr Opin Anaesthesiol, 2009; 22(2): 207-14.
5. Williams RG, Bragg DG, Nelson JA; Gossypiboma: the problem of the retained surgical sponge. Radiology 1978; 129: 323-6.
6. Chau W K, Lai K H, Lo K J; Sonographic findings of intra abdominal foreign bodies due to retained gauze. Gastrointestinal Radiology 1984; 9(1): 61-63.
7. Sheehan RE, Sheppard MN, Hansell DM; Retained intra thoracic surgical swab: CT appearances. Journal of Thoracic Imaging 2000; 15(1): 61-64.
8. O'Connor AR, Coakley FV, Meng MV, Eberhardt SC; Imaging of retained surgical sponges in the abdomen and pelvis. Am J Roentgenol 2003; 180: 281-9.
9. 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(3): 229-35.
10. Târcoveanu E, Dimofte G, Georgescu S, Vasilescu A; Laparoscopic retrieval of gossypibomas-short series and review of literature. ActaChirBelg, 2011; 111(6): 366-9.
11. Macario A, Morris D, Morris S; Initial clinical evaluation of a handheld device for detecting retained surgical gauze sponges using radiofrequency identification technology. Arch Surg 2006; 141: 659-62.