



Textiloma: Case Report of a Rarely Retained Foreign Body

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Abstract

Retained Foreign Object (RFO) is a collective term used to describe any object left unintentionally in the body at the end of the surgical or other interventional procedure. Retained objects such as surgical sponges, gauze pads, or other forms of textile may become source for infection and are often grounds for mal-practice lawsuits. High index of clinical suspicion and appropriate radiological imaging in patients presented with early postoperative obstructive symptoms can help in early diagnosis. We describe a case where a woman presented with the features of small bowel obstruction one week after cesarean section; a retained foreign body was recovered without major morbidity.

Introduction

Early recognition of a postoperative retained foreign body is essential, if delayed can lead to a considerable morbidity [1]. The term Gossypiboma (from Latin Gossypium cotton and Kiswahili boma place of concealment) is a term used to describe for retained surgical sponge. The word *textiloma*, which combines the word *textile* (until recently most surgical sponges were made of cloth) and the suffix *-oma*, meaning a tumor or growth [2]. Surgical sponges are the most common RFO (70%) in the abdominal cavity because of their frequent usage and small size. Moreover, a blood-soaked sponge in a hemorrhagic abdomen can be difficult to distinguish from blood [2]. Despite the wide spread use of surgical sponges with radiopaque marker, still some surgeons prefer the use of small drapes to pack the small bowel or bleeding site, which can easily be missed by correct sponge counting or radiological investigations.

Case Presentation

A thirty-year-old woman presented to our emergency department with a five-day history of colicky abdominal pain, associated with gradual abdominal distension and projectile bilious vomiting. The patient reported to have loose stools for 2-days prior to the onset of abdominal pain. She had undergone an elective cesarean section one week prior to admission at another district hospital and was discharged successfully after a 2-day postoperative stay. On examination, she was sick looking- oriented and afebrile, she had a non-tender distended abdomen with exaggerated bowel sounds. An abdominal X-ray revealed a single dilated small bowel loop with some fecal matter like mottled gas in the left iliac fossa, ultrasound abdomen showed dilated bowel loops with no intra-abdominal collection. A Computed Tomography Scan (CT scan) of the abdomen revealed dilated jejunal and ileal loops with collapse of the sigmoid colon - fecal matter with gas mottling was seen in left paracolic gutter. The radiographic findings were suggestive of retained foreign body. An emergency exploratory laparotomy was done and a retained foreign body (a small abdominal drape) was found along the sigmoid colon forming multiple adhesions with ileal loops. Adhesionolysis and foreign body was removed without resection of small bowel. Postoperative recovery was uneventful. She was discharged home after 3 days and was followed up for a period of 3 months as an outpatient where she reported clinical improvement.

Discussion

A foreign body retained in surgery is still a serious problem. The actual incidence is unknown but different estimates have been reported, 1 in 100 to 3,000 for all surgical interventions and 1 in 1,000 to 1,500 for intra-abdominal surgeries [3,4]. It is believed to be under reported, owing its medico-legal implications. Can cause an exudative or fibrinous response. As a result of local inflammation, the exudative pattern presents early in the postoperative period while the fibrinous response occurs later due to encapsulation of the retained foreign object within scar tissue. Nonspecific clinical symptoms and inconclusive imaging findings may delay an accurate diagnosis [5]. However, a high index of suspicion in patient with postoperative obstructive symptoms is needed to assist in early

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Figure 1: The axial CT scan of mid abdomen reveals dilated bowel loops and a dense peripheral radio-opacity with central mottling which is suggestive of Gossypiboma.



Figure 2: Intraoperative picture of abdominal drape found inside the abdomen.

diagnosis.

The clinical presentation and the time interval between the novel operation and the diagnosis of gossypiboma are variable and depend on the location and type of reaction evoked. About a third of gossypiboma patients remain asymptomatic in the initial period and often present later with complications [4], unlike our patient who presented early with obstructive symptoms perhaps due to large size the textile foreign body retained.

Retained foreign body can be diagnosed by the help of radiological studies such as plain radiography and Computerized Tomography (CT) [5,6]. A retained surgical sponge has a characteristic appearance on CT scan of a soft tissue mass with air-bubbles and a whirl-like pattern a finding that can be confused with an abscess (especially when a fistula is present) or with fecal matter at certain position in the early post-operative period [7,8]. It's simple standard surgical practice to have safety measures implemented to avoid such complication; meticulous swab and instrument count, thorough exploration of the surgical site at the end of procedures and avoid usage of material other than surgical sponge inside the abdomen. In this Patient, we feel, textile drapes in the preoperative counts weren't accounted for the total count. It is therefore necessary that all surgical textile materials used and instruments other than sponges should also be counted once at the start and twice at the conclusion of surgical procedures. However, counts are not always sufficient, since most reported cases occur in spite of a normal pack count [9]. To note Dillon and Park reported a patient with retained laparotomy sponge 11 months after hysterectomy; the sponge count had been performed twice according to the operative record [10].



Figure 3: Textile material abdominal drape found during surgery.

It is understandable that sometimes the correct count cannot be done in some instances, such as emergency operations or an unexpected change in procedure, in which disorganization occurs. On the other hand, when the accuracy of final count is in doubt, intraoperative radiologic screening may detect any retained surgical textile material impregnated with a radio-opaque marker. However, this can still be missed if the retained material has no radio-opaque marker like this patient. Although marked swabs and packs are widely used by vast majority of surgeons, there is no uniform policy towards this practice in some developing countries. Even though the surgeon carries the major responsibility, this problem can only be overcome if all team members in an operating room work together meticulously [11].

Conclusion

Although gossypiboma is rarely seen in daily clinical practice, it should be considered in the differential diagnosis of acute mechanical intestinal obstruction in patients who underwent surgery for early recognition. The better approach in the prevention of this condition can be achieved by meticulous count of all surgical materials and avoid use of non-radiopaque and other textile material.

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