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CASE REPORT

Case Report of Spontaneous Per Rectal Passage of a Gossypiboma

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ABSTRACT

Background: A retained foreign body after a surgical intervention, known as gossypiboma, is a rare yet devastating complication. Spontaneous per-rectal passage of such a foreign body has been rarely reported.

Case Report: We present such a case of a 30-year-old female who underwent an elective caesarean section and presented eight months later with mild abdominal discomfort, a palpable lump in the right lower quadrant and low-grade fever. Imaging suggested a retained abdominal sponge. The patient subsequently experienced spontaneous per rectal passage of the sponge, leading to complete resolution of symptoms without surgical intervention.

Conclusion: This case highlights the rare occurrence of spontaneous transmural migration and expulsion of gossypiboma. Clinicians should consider gossypiboma in the differential diagnosis of postoperative abdominal masses, even in elective surgeries with no apparent risk factors. Strict adherence to surgical safety protocols remains essential to prevent such avoidable complications.

Key words: Abdominal Sponge, Gosspibyoma, Retained Foreign Body, Trans-visceral Migration, Spontaneous Expulsion, Abdominal Mass

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Introduction

The word "gossypiboma" originates from a combination of two words, the Latin word "Gossypium" meaning cotton and the Swahili word "boma" meaning place of concealment. Gossypiboma is used to describe an entrapped cotton object usually sponge within the abdominal cavity. To determine the true incidence of the condition is difficult due to a number of reasons. Incidence has been reported in western literature to be between 1/1000 to 1/1500 abdominal surgeries (1). It has serious medicolegal implications resulting in increased morbidity for the patient and severe consequences for the surgeon (2). Several factors have been identified which are believed to be associated with increased incidence of this condition. These include but are not limited to: emergency procedures, unexpected intervention, poor organization, hasty sponge count, prolonged surgery, unstable patient, change of surgeons and obesity (3). A systematic review of reported gossypiboma cases from 1975-2023 detailed 493 cases (4).

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Herein, we report the case of a 30-year-old female who experienced spontaneous per rectal passage of a retained surgical sponge

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(gossypiboma) following an elective caesarean section, although our patient had none of the aforementioned associations. Gossypiboma is a rare but serious postoperative complication with significant clinical and medico-legal implications. Although transmural migration of retained surgical sponges has been documented, it is most often associated with complications such as obstruction, fistula formation abscess or sepsis (2,3). Asymptomatic transmural migration followed by spontaneous per rectal expulsion without any adverse outcome is exceedingly uncommon. Reporting such rare presentations is important to broaden clinical awareness, highlight atypical disease behavior and emphasize the need to consider gossypiboma in the differential diagnosis of postoperative abdominal masses even in elective surgeries with no apparent risk factors. This case contributes to the limited literature on spontaneous per rectal passage of gossypiboma and underscores the unpredictable natural history of retained surgical foreign bodies.

Case Report

A 30-year-old female underwent C-section 8 months prior after which she started feeling heaviness in pelvis and a small lump in the right lower abdomen. Mild pain at the site started a month later. At the time of presentation, she had also been experiencing low grade fever for a month. The symptoms of the patient were mild to moderate in intensity and had initially been controlled by medication. The patient presented in the OPD of Mayo Hospital, Lahore. On examination she had stable vitals. On examination there was a scar at the site of previous surgery in the lower abdomen. A visible lump of 5 x 10 cm was seen in the right lower abdominal quadrant which was firm in consistency, mobile and non-tender. Bowel sounds were audible with digital rectal and vaginal examination being unremarkable. Rest of the systemic examination was normal.

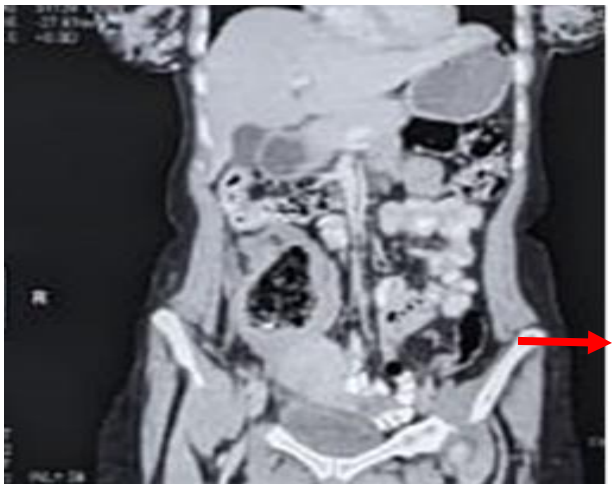

Figure 1: Pre-operative picture of abdominal CT scan showing mass with internal spongiform appearance and calcification

Routine blood baseline was done which was within normal ranges. Abdominal sonogram revealed a well-defined echogenic area measuring 80 x 60 mm seen in the right lower abdomen with dense posterior acoustic shadowing raising the suspicion of a foreign body. The patient was admitted with the diagnosis of gossypiboma. Further evaluation was done with a CT Abdomen and pelvis with IV contrast. A well circumscribed lesion in lower abdomen (RIF) measuring 7.2 x 5.3cm, heterogenous non-specific appearance with internal multiple air bubbles (spongiform appearance) hyperdense marker and inflammatory fat stranding was noted as shown in Figure 1.

The findings were discussed with the patient and her family. After discussion it was decided to undertake diagnostic laparoscopy and proceed further. However, one day later the patient informed that she had passed something the last night after which her abdominal lump disappeared. On examination it was found to be an abdominal sponge as shown in Figure 2.

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Figure 2: Sponge spontaneously passed per rectum

The symptoms of the patients settled post-surgery. On examination there was no mass detected. She was able to tolerate food and water. An ultra-sonogram was done which showed no abnormality. She was kept under observation for 48 hours. Further follow-up was done in the OPD. At the time of submission, the patient has been on follow-up for 1 year with no complications or return of symptoms.

Discussion

Cotton sponges as a result of their nature are not broken down in the body. Two types of foreign body reactions may occur. In one there is a fibrinous reaction which results in the encapsulation of the foreign body resulting in a mass formation. In the second type of reaction there is exudation formation which can result in inflammation and abscess formation as well with migration of the mass into the intestinal tract (5). Sometimes combination of both can be seen as well. Our patient initially had a lump which was palpable but later on she also started having low grade which was suggestive on developing infection. Migration through the wall of the intestine can result in various complications such as bleeding, malena, fistula formation, abscess or obstruction [6]. Very rarely after trans-visceral migration spontaneous passage of the retained foreign body has been reported (2,3,5,7). Transvisceral migration and spontaneous expulsion after laparoscopic procedure has also been documented (8,9,10).

Once Gosspibyoma has been diagnosed, usual treatment is surgical. We had admitted the patient with diagnosis of Gosspibyoma. She had no obstructive symptoms and was therefore planned for elective list. Luckily nature intervened on behalf of the patient and she had a spontaneous passage of the sponge via the rectum resulting in complete resolution of the symptoms. This case is reported to emphasize that, although surgical removal remains the standard management of gossypiboma, rare instances of spontaneous transmural migration and expulsion without complications can occur. Awareness of such presentations can help clinicians avoid unnecessary surgical interventions in carefully selected, stable patients while maintaining vigilant monitoring. Furthermore, this case reinforces the critical importance of strict adherence to surgical safety protocols, meticulous sponge counts and team-based operative practices to prevent this avoidable complication. Reporting rare outcomes such as this adds valuable insight to existing literature and supports continued efforts toward patient safety and surgical accountability.

Patient Consent

Detailed informed consent for the publication of this case report was obtained from the patient.

Conflict of Interest: Nil

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All the authors agree to take responsibility for every facet of the work, making sure that any concerns about its integrity or veracity are thoroughly examined and addressed.	