



## Spontaneous elimination of gossypiboma: A case report

### Eliminação espontânea de gossipiboma: Um relato de caso

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#### ABSTRACT

**Introduction:** The term gossypiboma refers to textile matrix surgical items inadvertently left inside cavities after surgical wound closure. The unrecognized presence of a foreign body of any nature in the abdominal cavity after an operation is a situation rarely reported in the medical literature and surrounded by a potential for serious complications, which can evolve into a fatality. This article is an observational and descriptive case report study. The information was collected by reviewing the medical records and photographic records of the surgical procedures to which the patient was submitted. The objective of this study is to present a case of spontaneous elimination of gossypiboma in a patient who had undergone a previous cesarean section. **Report:** Patient R.T.T.S, 17 years old, female, previously healthy, with diffuse, sporadic abdominal pain, for 10 months, after cesarean section, with progressive worsening. For 1 week, she presented significant worsening of pain associated with constipation, difficulty in bowel movements and, for 1 day, anal elimination of content similar to vegetable loofah (SBS). On physical examination, the patient presented mild bulging in the hypogastric region and, rectally, the presence of foreign body elimination. **Discussion:** Imaging methods are important allies in the identification of this type of problem. The surgical approach adopted will depend on the clinical and radiological presentation of the gossypiboma. In the case reported here, we opted for rectal removal of the foreign body with preservation of the integrity of the abdominal cavity, since the patient did not present symptoms of abscess or fistulas. Progressing in the postoperative period with good clinical conditions. Cases like this increasingly reinforce the adoption and strict compliance with checklists prior to surgeries and at the end of surgeries. In order to do so, it provides safe surgeries with excellence for patients in any institution in the country.

**Keywords:** Surgical complications, Spontaneous elimination, Gossypiboma.

#### INTRODUÇÃO

The term gossypiboma refers to textile matrix surgical items inadvertently left inside cavities after surgical wound closure<sup>1</sup>. The word derives from the Latin Gossypium, which means cotton, and the Swahili Boma, which means hiding place<sup>2</sup>. The first case was described by Wilson in 1884. The unrecognized presence of a foreign body of any nature in the abdominal cavity after an operation is a situation rarely reported in the medical literature and surrounded by

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a potential for serious complications, which can evolve into a fatality. Not to mention several legal repercussions related to the situation.

The actual incidence rate of intra-abdominal foreign body retention, whether surgical instruments or compresses or gauze, is well known, although data on this type of occurrence report it as uncommon. There is a significant variation in its frequency, with reports ranging from one case for every 100 to one for about 18000 laparotomies. This fact is probably related to the low number of reports on this subject, in view of the medico-legal implications involved.

The most common foreign body found in the abdominal cavity is of textile origin. Transmural migration of gossypiboma is extremely rare, usually occurring in the intestine, bladder, and chest. Spontaneous expulsion was reported in a few cases, and the mean interval between surgery and time of diagnosis was 2.2 years.

There are two types of foreign body reactions described in the medical literature: fibroblastic and exudative. The aseptic fibrous response results in adhesion, encapsulation, and granuloma, usually remains asymptomatic, or causes chronic progressive symptoms over months to years. The exudative reaction causes the formation of a cyst or abscess that can fistulize into adjacent viscera, and in these cases the symptoms are more severe. Increased intra-abdominal pressure caused by gossypiboma may cause partial or complete necrosis of the intestinal wall. Risk factors associated with increased incidence of gossypiboma include emergency surgical procedures, prolonged surgery time, unplanned change in the course of a procedure, involvement of more than one surgical team, and patients with a higher body mass index.

Imaging findings prior to transmural migration are variable, depending on the nature of the sponge, its radiopaque marker, the length of time the foreign body has been present, and the nature of the reaction. Calcification is a rare finding and is more common in long-standing cases.

## **METHODOLOGY**

This article is an observational and descriptive case report study. The information was collected by reviewing the medical records and photographic records of the surgical procedures to which the patient was submitted. Subsequently, a literature review was carried out, from January 2010 to April 2024 on gossypibomas and their complications, and 4 main articles were selected for the elaboration of the current report, whose objective is to present a case of spontaneous elimination of gossypiboma in a patient who underwent previous cesarean section.

## CASE REPORT

Patient R.T.T.S, 17 years old, female, previously healthy, with diffuse, sporadic abdominal pain, for 10 months, after undergoing cesarean section, with progressive worsening since then. For 1 week, she presented significant worsening of pain associated with constipation, difficulty in bowel movements and, for 1 day, anal elimination of content similar to vegetable loofah (SBS). On physical examination, the patient presented a mild bulge in the hypogastric region and, rectally during anoscopy, there was the presence of foreign body elimination. On CT scan of the total abdomen: Segmental parietal thickening of the colon at the level of the transition between the descending and the sigmoid in the hypogastrium. Edema of the local mesenteric fat. High-density linear material (metallic?) probably in the lumen of the colon in continuity from this segment to the perianal region, leading to the suspicion of gossypiboma within the rectosigmoid intestinal loop (Figures 1, 2 and 3 below).



It was then decided to remove the same rectal route in the operating room under spinal anesthesia (Figures 4 and 5 below). The procedure was uneventful and the patient remained hospitalized for 24 hours under observation, evolving with improvement of the pain, good acceptance of the diet and functioning intestinal transit. After that, due to his stable condition, he was discharged in good general condition for outpatient follow-up.



## CONCLUSION

Anamnesis and physical examination are essential to establish the diagnostic hypothesis of gossybiboma, although the clinical picture lacks specificity. Most patients are symptomatic. The signs and symptoms are usually linked to the type of reaction triggered by the body in response to the presence of the foreign body, which in turn usually ends up determining the time of evolution. Its presence should be suspected when in the postoperative period there are complaints that are incompatible with the normal postoperative evolution. Among the most frequent findings are pain, palpable mass, vomiting, weight loss, abdominal distension, abscesses, fistula, episodes of subocclusion and/or complete intestinal obstruction, as observed in the present study.

Imaging methods are important allies in identifying this type of problem. The surgical approach adopted will depend on the clinical and radiological presentation of the gossypiboma. In the case reported here, we opted for rectal removal of the foreign body with preservation of the integrity of the abdominal cavity, since the patient did not present symptoms of abscess or fistulas. Progressing in the postoperative period with good clinical conditions.

Cases like this increasingly reinforce the adoption and strict compliance with checklists prior to surgeries and at the end of surgeries. In order to provide safe surgeries for patients in any institution in the country.



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