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Gossypiboma in a 15 Year Old girl: A Case Report

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Abstract

Gossypiboma, a rare surgical complication, occurs when a surgical sponge is inadvertently left behind in the body, leading to a foreign-body reaction. This case report presents a 15-year-old girl who developed abdominal pain and a palpable mass three years after a laparotomy for excision of a lymphangioma of the abdomen. Radiological imaging confirmed the presence of a retained surgical sponge, which was successfully removed through surgery. This case highlights the importance of meticulous surgical technique and postoperative care to prevent such complications.

Keywords: gossypiboma, retained foreign body, surgical complication, abdominal pain, laparotomy, radiology

Introduction

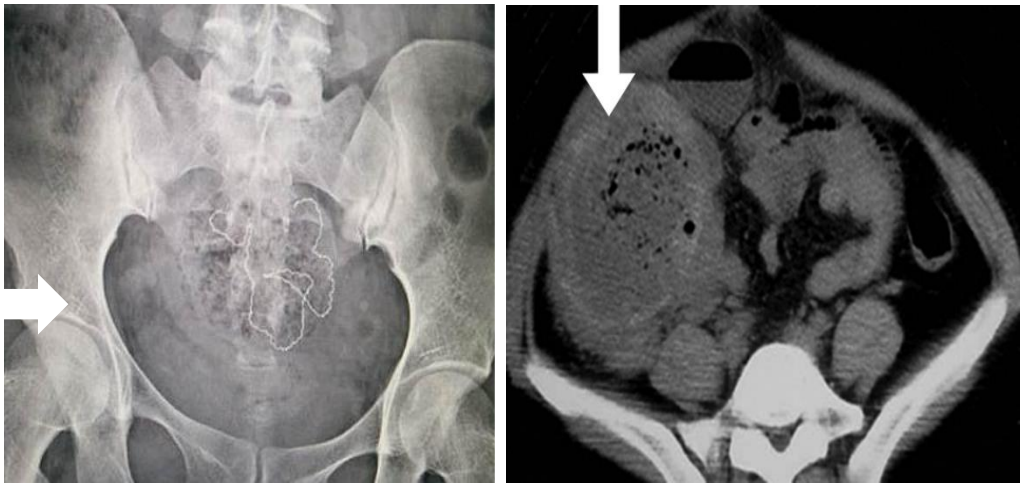
A retained foreign body (RFB) is a serious surgical complication that can have significant consequences. Surgical sponges, also known as gossypibomas, are the most common type of RFB.[1] They can cause pain, infection, and obstruction of the intestines[2]. In some cases, RFBs may remain undetected for years, leading to delayed diagnosis and treatment.

Case Presentation

A 15-year-old girl presented with a history of pain in the lower abdomen and occasional non bilious vomiting and constipation for one month. She had been treated with over the counter medication for the pain and emesis but to no avail. She had undergone a laparotomy for management of abdominal lymphangioma three years ago, elsewhere. So a diagnosis of Adhesive Subacute Intesinal obstruction was used as the working diagnosis. On physical examination, a round, mobile mass was palpable in her lower abdomen. Laboratory investigations were unremarkable.

Imaging Studies

- **X-ray:** Plain X-ray of the abdomen revealed a radiopaque marker(shown by the white arrow) within the mass in the pelvis, suggesting the presence of a foreign body.



- **CT scan:** A CT scan confirmed the diagnosis of a gossypiboma, showing a well-defined mass with a spongiform pattern in the pelvis(shown by the white arrow). No remnants of the lymphangioma were noted.

Surgical Management

The patient underwent exploratory laparotomy through the previous infraumbilical transverse incision, during which the retained surgical sponge was successfully removed intact. It had a well defined capsule around it and was found in the pelvis. The postoperative course was uneventful, and the patient was discharged from the hospital a few days later.

Discussion

Gossypiboma is the medical term for a retained surgical sponge that remains in the body after surgery. It is also sometimes referred to as a textiloma. This condition can occur when a sponge is inadvertently left behind during an operation, leading to a foreign body reaction.

The presence of a retained foreign body (RFB) should be considered in any postoperative patient presenting with pain, infection, or a palpable mass. While a CT scan is typically the primary diagnostic tool, other imaging modalities may also be helpful.[3]

Identifying RFBs during surgery can be difficult due to various factors,[4] including:

- Poor image quality: Intraoperative radiographs may be of low quality, especially in obese patients.
- Hidden sponges: Surgical sponges can become twisted or folded, making them difficult to detect.
- Misinterpretation: Markers within the sponge may be mistaken for other objects, such as calcifications or surgical clips.

The standard treatment for RFBs is surgical removal. While laparotomy is often the preferred approach, endoscopic or laparoscopic techniques[5] may be considered in certain cases.

To prevent RFBs, surgeons should:

- Use radiologically detectable sponges and towels.
- Carefully consider the use of small sponges in large cavities.
- Perform a thorough wound examination before closing the incision.
- Implement electronic article surveillance systems to track sponges.[6]

Conclusion

Retained foreign bodies are a preventable complication of surgery. By following best practices and utilizing advanced technologies, the incidence of RFBs can be significantly reduced.

This case report highlights the importance of considering RFBs in the differential diagnosis of postoperative patients with abdominal pain or palpable masses. Early diagnosis and prompt surgical removal are essential to prevent complications and ensure a favorable outcome.

Ethics approval and consent to participate: The case report was approved by the Institutional Ethics Committee. Written informed consent was obtained from the patient's parents for participation in this case report, as the patient was a minor at the time of treatment.

Consent for publication: Written informed consent was obtained from the patient's parents for publication of this case report and the accompanying images.

Availability of data and material: The datasets used and analyzed during the current case report are available from the corresponding author upon reasonable request, subject to privacy and ethical restrictions regarding patient data.

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