

Intraabdominal gossypiboma mimicking gastrointestinal stromal tumor: A case report

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Gossypiboma is used to describe a retained surgical swab in the body after an operation. Intraabdominal surgical sponge is an uncommon surgical error. Gossypiboma may cause serious morbidity and may lead to mortality. Gossypibomas should be included in the differential diagnosis of soft-tissue masses detected in patients with a history of a prior operation. In this case we present a 67-year-old female who had a laparotomy for acute cholecistecytitis 5 years previously and was discovered to have a retained surgical swab.

Key words: Gossypiboma, intraabdominal sponge, GIST

Gastrointestinal stromal tümörü taklit eden intraabdominal gossypiboma: Vaka sunumu

Gossypiboma ameliyat sonrası karın içerisinde cerrahi bezin kalması olarak tanımlanmaktadır. Intraabdominal cerrahi bezin kalması yaygın olarak görülmeyen bir hatadır. Gossypiboma ciddi bir morbidite ve mortaliteye neden olabilir. Gossypiboma, daha önce ameliyat hikayesi olan bir hastada eğer yumuşak bir doku kitlesi saptanırsa ayırıcı tanıda düşünülmelidir. Biz 5 yıl önce akut kolesistit nedeniyle laparotomi uygulanmış ve daha sonrasında cerrahi bez kalan 67 yaşında bayan bir hastayı sunduk.

Anahtar kelimeler: Gossypiboma, intraabdominal bez, GIST

INTRODUCTION

Gossypiboma or textiloma (cottonoid) is used to describe a retained surgical swab in the body after an operation. However, some complications result from human error, both in the intra-operative and postoperative periods. The literature estimates that a foreign body is retained after intraabdominal surgery in 1:1,000 to 1:1,500 cases (1,2). In this case, we present a 67-year-old female who had a laparotomy for acute cholecystitis five years previously and was discovered to have a retained surgical swab.

CASE REPORT

A 67-year-old female presented with a 12-month history of recurrent, vague, central abdominal pa-

in. There was no vomiting, diarrhea, constipation, abdominal distension, fever, anorexia, or weight loss. She had a mobile, palpable, firm, non-tender mass in the right iliac fossa. In the surgical history, she had a laparotomy for acute cholecystitis five years previously.

In the physical examination, a median incisional scar was seen and sensitivity was present on palpation. A hard painless mass was palpated. The patient reported no change in bowel habits (such as diarrhea or constipation). All of the laboratory parameters were in normal limits. In the radiological examination with ultrasonography and computed tomography (CT), a heterogeneous mass image measuring 15x10x8 cm in diameter was de-

tected inferior to the pancreas, associated with the transverse colon and jejunal mesentery (Figure 1). Upper gastrointestinal system endoscopic examination did not reveal any pathological appearance. Colonoscopic evaluation of the patient was also normal.

In light of the foregoing findings, explorative laparotomy was planned upon clinical opinion of gastrointestinal stromal tumor (GIST) originating from the small intestine. In the exploration, a mass lesion was identified 60 cm distal to the Treitz ligament, with the diameter as measured by the CT, and infiltrative to the jejunum. The mass was resected en bloc together with 55 cm of the jejunum. End-to-end anastomosis of the jejunum was performed. Macroscopic inspection confirmed the true nature of the lesion. On macroscopy, retained surgical sponges (gossypiboma) were observed in the mass (Figure 2). The mucosal surface of the jejunum was normal, except for rare lymph node formations in the serosal area. Microscopic examination revealed fibrous encapsulation containing the foreign body giant cell reaction (Figure 3). The reaction had occurred against the retained gauze sponge. Postoperatively, no complications occurred, and the patient was discharged on the 8th day of the hospitalization.

DISCUSSION

Gossypibomas, otherwise known as textilomas, are retained surgical sponges. The word is bilingually derived from *Gossypium* (Latin): cotton and *Boma* (Kiswahili): place of concealment. It can occur as a complication of almost any surgical procedure, such as cardiothoracic surgery, exploratory laparotomy, gynecologic procedures, internal fixation of fractures, and even after neurosurgical procedures (2,3). Its frequency is higher in developing countries, and incidence is higher among women than men (1).

A gossypiboma may present in either the immediate or delayed phase. Patients generally complain of nausea, vomiting, a palpable mass, rectal bleeding, or altered bowel habit. It may also present with non-specific fever, anorexia and weight loss (1). This occurs secondary to an exudative inflammatory reaction, often resulting in penetration through the wall of a neighboring viscus or organ, with migration into the organ. This results in obstruction or gastrointestinal hemorrhage from erosion of vessels. The most common site of migration, and impaction, is the terminal ileum, though



Figure 1. Abdominal CT scan showing a round well-defined soft-tissue mass in the upper abdomen containing an internal high-density area.

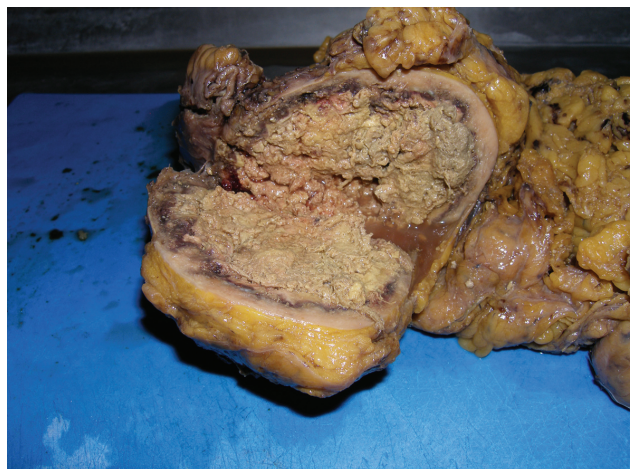


Figure 2. Surgical specimen (gossypiboma).

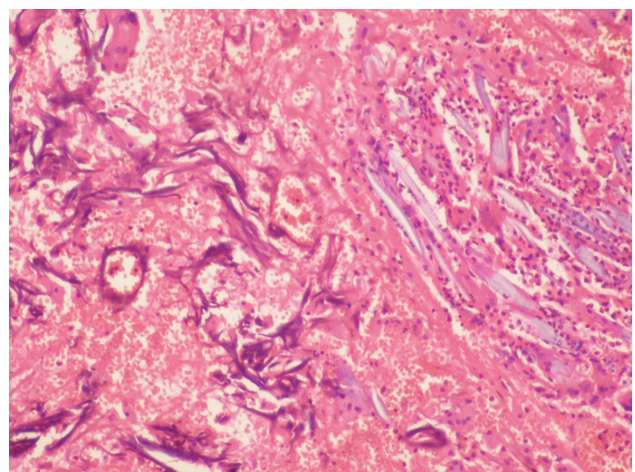


Figure 3. Microscopic examination revealed fibrous encapsulation and the foreign body giant cell reaction.

there have been reported cases of transileal migration of a retained sponge into the rectum (4). Our case had nonspecific symptoms like nausea, dyspeptic complaint, weight loss, and fever, in the late period. Due to foreign body inflammatory reaction, partial penetration to the small intestine had occurred. En bloc resection was planned based on the presumptive diagnosis of a malignant tumoral lesion, and we performed an end-to-end jejunojunctional anastomosis.

In the acute phase, a plain radiograph may show evidence of the radiopaque present on all modern swabs (5). However, up to 10% of these have been found to be falsely negative. If seen in the delayed acute phase, they may present as a heterogeneous mass, surrounded by fibrotic capsule, and containing gas. A presumptive diagnosis of a retained swab should be further investigated with ultrasound, CT or magnetic resonance imaging (MRI). A retained swab is echogenic on ultrasound, and presents as a sharply delineated acoustic shadow or a hypoechoic mass with a complex cystic pattern. CT reports suggest that a spongiform pat-

tern, surrounded by a dense, enhancing rim is suggestive of a retained swab. If there remains any question regarding the presumptive diagnosis, an MRI can be performed. As a preoperative evaluation, we used ultrasonography and CT imaging techniques. Results were similar to the literature (Figure 1).

In conclusion, gossypibomas are uncommon, mostly asymptomatic and hard to diagnose. A correct diagnosis of a retained swab has been reported to occur in only one-third of all cases, with a new-onset tumor or a recurrent tumor being the most common differential diagnoses. Unnecessary staging and patient anxiety can occur as a result of these misdiagnoses, particularly in the case of a suggested neoplasm. An unnecessarily aggressive surgery may ensue, if the correct diagnosis is not made. Gossypibomas should be included in the differential diagnosis of soft-tissue masses detected in patients with a history of a prior operation. Patient-clinician and clinician-radiologist interactions and compliance enhance the possibility of accurate diagnosis.

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