

Gossypiboma Mimicking Peritoneal Hydatid cyst

Daniel Gonzalez Gonzalez and Luis Ruso Martinez*

Professor of Surgery, Department of Surgery "3", Hospital Maciel, ASSE, School of Medicine, University of Republic (UdeLar), Montevideo, Uruguay

***Corresponding Author:** Luis Ruso Martinez, Professor of Surgery, Department of Surgery "3", Hospital Maciel, ASSE, School of Medicine, University of Republic (UdeLar), Montevideo, Uruguay.

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Abstract

Gossypiboma, called textilomas and also retained foreign body, is infrequent but serious complication following surgical procedures and is defined as retained surgical sponge in the body compartment after surgery.

We report a case of X-rays and computed tomography (CT) findings of a gossypiboma, which we observed after splenectomy by trauma as calcified tumor with large solid components in the right lower quadrant of abdominal cavity. The intraoperative appearance of tumor suggested a peritoneal hydatid cyst, because in Uruguay they are a high prevalence of this pathology.

Preoperative diagnosis could be very difficult. The symptoms of retained sponge are uncertain over time, its imaging diagnosis is difficult because can be confused with other etiologies and after a laparotomy represent a serious problem that exposes the surgical team to legal action.

Keywords: *Gossypiboma; Retained Foreign Body; Hydatid Cyst; Peritoneum*

Introduction

This complication is frequently reported after abdominal surgical procedures or other places including orthopedic and neurosurgery [1]. The most important risk factors for retained foreign body are emergency and unplanned surgery. Clinical symptoms are variable in time and may be early or late in months or years after initial surgery and are often nonspecific. Most clinical symptoms are depend on the gossypiboma location, impact of the inflammatory reaction on adjacent organs; therefore, intestinal occlusion is a frequent clinical presentation [2].

Preoperative diagnosis could be very difficult. Imaging procedures such as X-ray, ultrasound, computed tomography, magnetic resonance imaging, may be helpful.

Case Report

63 year old male, with a surgical background of splenectomy for penetrating trauma by transverse incision in the left upper quadrant, was referred to emergency room with a small bowel obstruction; that was confirmed by plain abdominal X rays and demonstrated the incidental finding of a 10 cm calcified mass in the right lower quadrant (Figure 1).

Intestinal obstruction was resolve conservatively and a CT Scan confirms the presence of this mass without relation to the liver, enclosed by small and large bowel (Figure 2). The patient is later operated electively with diagnosis of peritoneal hydatid cyst.



Figure 1: X-rays. Calcified abdominal mass.

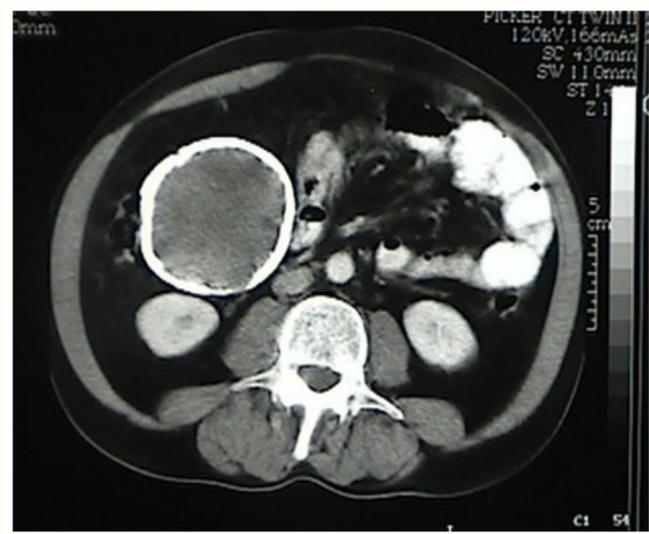


Figure 2: TC. showed total calcification with homogeneous content.

During surgery a stony mass was completely resected after being easily mobilised from the adjacent structures (retroperitoneum, colon and small bowel). Postoperatively there were no complications and the patient was discharged on day 5.

The specimen was opened and inside the calcified wall of this cystic mass a sponge was found (Figure 3).



Figure 3: Surgical specimen. Showed the textile foreign body and calcification layer.

Discussion

The diagnosis of hydatid disease was made due to the high prevalence of this pathology in Uruguay in its different stages and the other side the incidence of retained foreign bodies is low and usually not well known. As in this case 80% of these foreign bodies are of textile origin (gauze swabs, sponges, drapes). Textilomas is an important disease with a reported morbidity of 50% and a mortality of 10% [3].

The presence of a calcified wall explains the inflammatory reaction that caused the sterile enclosing of the gossypiboma. Infectious complications usually arise in the early postoperative period. Adhesions or fistulae may remain asymptomatic for several years before they manifest clinically as in this patient. It is not infrequent to have an incidental finding of a foreign body many years after the procedure. Yagmur [4] in a review of 32 cases established a time from the causative operation to presentation with a retained surgical sponge ranged from one to 480 months (mean \pm SD: 56.5 \pm 93.5 months).

Correct preoperative diagnosis can be made for only one third of cases [5].

A clear cut diagnosis was difficult in this case due to the absence of typical radiological signs for hydatid disease such as complete calcification, honeycomb appearance and daughter cysts or the typical signs for textilomas such as net appearance, gas bubbles between the fibers or folding. The origin of the peritoneal localization is thought to be from the liver due to a rupture (so called secondary peritoneal hydatidosis) or the rare situation of a full cyst plummeting from the liver without rupture. The term coined in this side of the world for this scenario is "primitive heterotopic peritoneal hydatidosis".

The treatment of gossypiboma, unquestionably, is by removal. However very few have documented spontaneous passage of gauze via the rectum with resolution of symptoms [6].

Conclusion

Gossypiboma should be considered in the differential diagnosis of abdominal hydatid cysts in the presence of a previous abdominal operation. This is especially important in countries with a high incidence of hydatid cysts, as these will be the countries where the lesion is most likely to be mistaken for an echinococcal lesion [7].

Textilomas are a reality in current surgical practice, whose prevention and diagnosis remain a challenge.

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Conflicts of Interest

The authors declare that there are no conflicts of interest associated with this manuscript.

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