



Intraperitoneal Textiloma: A Case Report

A. Bachar^a, N. Fakhiri^{a*}, T. El Abbassi^a and MR. Lefriyekh^a

^a *Department of Visceral Surgical, Faculty of Medicine and Pharmacy, University Hospital Center Ibn Rochd, Hassan II University, Casablanca, Morocco.*

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/91896>

Case Study

Received 15 July 2022
Accepted 26 September 2022
Published 29 September 2022

ABSTRACT

The omission of a foreign body during a surgical procedure remains the dread of the surgical team whose vigilance can be disturbed by several factors dominated by emergency procedures, intraoperative bleeding, obesity, unexpected change of procedure or the placement of an operative field to protect the intestinal loops during parietal closure. Inside the peritoneum, the textiloma initiates an inflammatory reaction of the exudative type with local suppuration. We report the case of a patient operated on for a hydatid cyst of the liver admitted to the department for a recurrence of a peritoneal hydatid cyst. During exploration we found a textiloma forgotten during the previous operation.

Keywords: *Textiloma; abdominal surgery; surgical field; pseudocyst.*

1. INTRODUCTION

Textiloma is defined as the retention of surgical material, usually textile, in the body. The incidence of textilomas has been greatly reduced by safety measures in operating theatres and the resulting medicolegal implications [1]. They remain the dread of the surgeon who is commonly held responsible for the incident. They remain a serious complication with potential for

significant morbidity and mortality. These iatrogenic complications are often a source of conflict between the surgical team and the patient's family.

2. CASE REPORT

We report the case of a 19-year-old patient operated in 2020 for peritoneal and hepatic hydatidosis at the level of segments IV, V, VI, VII

*Corresponding author: E-mail: nassima.fakhiri@gmail.com;

and VIII, he was placed on albendazole 400 mg for 4 months, then operated in 2021 for a hepatic abscess at the level of segments VI and VII measuring 11 cm, the post operative effects were simple. The patient presented to the consultation for a control, the patient was asymptomatic, the clinical examination was normal, Abdominal ultrasound showed a large intraperitoneal cyst measuring 20 cm and partitioned, the chest X-ray was normal, hydatid serology was positive, and we completed the scan with an abdominal CT scan, which showed a hypodense formation extending intraperitoneally from the splenic hilum to the right iliac fossa, with a thin wall and a liquid density that was multipartitioned and not enhanced after the injection of contrast medium. The cyst measured 173 x 122 mm in axial direction and was 251 mm high (Fig. 1).

The biological assessment was normal, Hb: 14g/dl, WBC: 6400e/mm³, PQ: 350000.

The hepatic work-up did not show any biological cholestasis, nor did the blood ionogram.

We operated on the patient and found a medium-sized effusion of serous liquid which was removed and evacuated with an operating field forgotten in the abdomen during his last operation, and encapsulated in a pseudo-peritoneal cavity, which was extracted (Figs. 2,3).

The patient's postoperative course was simple, the bacteriological examination of the fluid sampled did not reveal any germs and the patient was declared discharged at D3 postoperatively.

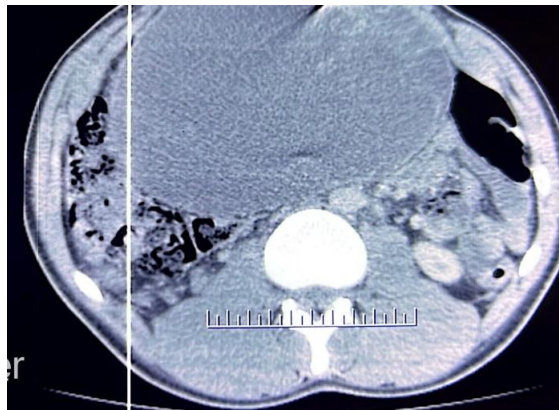


Fig. 1. CT image showing an intraperitoneal cystic formation



Fig. 2. Intraoperative image showing the textiloma (surgical field)



Fig. 3. Intraoperative image showing the pseudo cavity. Afterwards. Removal of the textiloma

3. DISCUSSION

Textiloma or gossypiboma is a textile object accidentally left behind during surgery. It remains the most common foreign body. It can also involve staples, needles, plastic tubing, electrodes or, more anecdotally, pliers, clamps, surgical retractors [2,3].

Textiloma is a rare complication occurring approximately one to three times in 10,000 surgical procedures [4]. Intraperitoneal and gynaecological textilomas are the most frequently reported [4].

Several factors contribute to its occurrence, including the difficulty of the surgical procedure, interventions during the second half of the night. Several risk factors have been identified, notably the change of surgical team, significant blood loss, failure to count the number of compresses and instruments, fatigue due to lengthy operations, as well as surgery on obese persons [5], the use of an operating field to protect the intestinal tract during parietal closure.

From a pathophysiological point of view, the textile fibres provoke an inflammatory reaction with exudation from the 24th hour, followed by the formation of granulation tissue (8th day), and finally fibrosis is organised from the 13th day. This evolution explains, in the absence of infection, the possibility of encystation, encapsulation or even calcification with a sometimes-long tolerance as in the case of our patient [6].

The clinical manifestations are multiple and varied; they can be manifested by a long history of abdominal pain, acute intestinal obstruction, deep suppurations, an abdominal mass as found in our patients, but above all, they can be

discovered fortuitously during surgery, simulating a tumour, or after endoscopic examination [5,7].

Diagnosis is based on medical imaging methods such as an unprepared abdomen (UAP), ultrasound, ultrasound, CT scan and magnetic resonance imaging (MRI).

The latter two are the most accurate in most cases. The characteristic image is a spongiform appearance with the presence of extra-digestive or intra-lesional air bubbles without any notion of infection [8].

These air bubbles correspond to air embedded in the mesh of a cotton pad [9,10]. However, this image is inconsistent, as in our case where it mimicked a cystic formation on ultrasound. On CT scan it contained a spontaneous hyperdensity. The radiological diagnosis retained was an intraperitoneal cyst of the right flank with a benign appearance.

From a medico-legal point of view, studies have shown the existence of withholding of information concerning diagnoses which can be a source of legal incidents and administrative sanctions [5].

Once the diagnosis of textiloma is made, it can be removed by conventional surgery or by laparoscopic surgery. The laparoscopic approach is a good option for resolution of this problem [11].

Reports in the literature regarding laparoscopic resolution are still scarce. But conversion to open surgery if laparoscopy is considered unsafe because of the long time to progression or the size of the retained material [12].

In our case the diagnosis of textiloma was not retained preoperatively, the size and location made the laparoscopic approach difficult.

Amongst several means of combating the omission of intraperitoneal surgical material, it is necessary to avoid using an operating field or a compress to protect the intestinal loops during parietal closure and to count the number of items before and after parietal closure.

4. CONCLUSION

Despite the current advances, caution is still required regarding surgical compresses or drapes on previously operated sites, which may be responsible for pseudotumour granulomas, causing significant tissue damage around the foreign body accidentally left in place. According to jurisprudence and medical law, the discovery of a textiloma is recognised as a fault, leading to the surgeon's liability.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

CONSENT

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Marc Williams JRCRep 2015 J 9(1): 43–48. Transduodenal migration of a retained surgical swab causing small bowel obstruction - imaging findings in the acute setting and prior to onset of symptoms - PMC.
2. Atul A Gawande 1, David M Studdert, E John Orav, Troyen A Brennan, Michael J Zinner. Risk factors for retained instruments and sponges after surgery – PubMed; 2003.
3. Taçyıldız I, Aldemir M. The mistakes of surgeons: « gossypiboma ». Acta Chir Belg. févr 2004;104(1):71-5.
4. Doh K, Thiam I, Takin RCA, Bissirou I, Gaye GW. Un cas de textilome renal simulant une tumeur de découverte anatomopathologique. Afr J Urol. déc 2017;23(4):364-7.
5. Sarr I, Ndong A, Thiam O, Seck M, Toure AO, Cissé M, et al. Migration intra-digestive de textilome abdominal sous de multiples aspects cliniques. 1 déc 2018; 18:2574-8.
6. Issam Serghini¹, Abdelghani El Fikri², Jaafar Salim Lalaoui¹, Mohamed Zoubir¹, Mohammed Boui³, Mohamed Boughanem¹. Textilome abdominal: À propos d'un cas [Internet]; 2011. Disponible sur: <https://www.panafrican-med-journal.com/content/article/9/10/full/>
7. Klein J, Farman J, Burrell M, Demeter E, Frosina C. The forgotten surgical foreign body. Gastrointest Radiol. 1 déc 1988;13(1):173-6.
8. Souleymane S, Diakaridia D, Alassane K, Richard N, Ilias G, Issa D, et al. Aspect radiologique inhabituel d'un textilome de découverte anatomopathologique. J Afr Imag Méd. 2021;4(1):62-65.
9. Saadi A, Bouzouita A, Kerkeni W, Ayed H, Miled AB, Cherif M, et al. Une masse abdominale. Rev Médecine Interne. 2017;5(38):347-8.
10. Hammoud D, Ammouri N, Rouhana G, Saad H, Hussein H, Sleiman CA, et al. Aspects radiologiques des textilomes. J Radiol. 2001;82(8):913-6.
11. Sánchez AW. Laparoscopic resolution of textilomes (gossypibomas). 2020;5:3.
12. Sista F, Tabbara M, Barrat C, Carandina S. Laparoscopic Removal of Giant Gossypiboma. CRSLs MIS Case Rep SLS [Internet]. 16 nov 2014 [cité 19 juin 2022];18(4). Disponible sur: <http://crsls.sls.org/2014-00032>

© 2022 Bachar et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/91896>