

## ***A case of forgotten textile: Rare cause of bowel obstruction***

SD Rakotomena<sup>1</sup>, NNM Razafimanjato<sup>2</sup>, T Rajaonarivony<sup>1</sup>, AF Rakototiana<sup>3</sup>, HN Rakoto-Ratsimba<sup>1</sup>

### **ABSTRACT**

Forgetting an abdominal foreign body stays an universal fear of surgeons. Authors describe a case of textiloma, delivered by the anus through a sigmoidal fistula, five months after a caesarean intervention. The consultation's reason was an occlusive syndrome. The textiloma was extracted under laparotomy and the further surgical was simple. Authors will discuss the physiopathological and diagnostic features throughout the literature.

**Keywords:** *Abdominal surgery, Foreign body, Iatrogenic lesion, Textiloma*

### **Introduction**

The textiloma is a rare iatrogenic lesion caused by forgetting foreign textile body on the operating site. Its evolution can be dramatic, sometimes requiring secondary operative procedure. We report a case of textiloma delivered by the anus in a patient who had a caesarean five months ago, admitted for intestinal occlusive syndrome at the University Hospital Center of Antananarivo (Madagascar).

We will discussing all the complexity of the physiopathology and the diagnostic difficulty of the intra-abdominal textiloma throughout the literature.

### **Observation**

Woman who had a caesarean section 5 months ago, was admitted to the Emergency Department of the Antananarivo Hospital Center (Madagascar) for inability to pass gas or stool with vomiting for 3 days. The patient was afebrile with a distended abdomen and a foreign body through the anus (Figure 1). Biology reveals an inflammatory syndrome without hyperleucocytosis. The unprepared abdomen radiography was in favor of an occlusive syndrome of colic type.

A median laparotomy discovered purulent peritoneal fluid with a real gangue consisting of epiplo-ileo-sigmoid adhesions. There was also multiple mesenteric adenopathies, a sigmoidal fistula, and a sigmoid containing a hard foreign body. After adhesiolysis, foreign body was identified as a textiloma which the distal tip was delivered by the anus.

The textiloma was extracted through the sigmoid fistula opening (figure 2).

A toilet and peritoneal drainage were performed before the parietal closure. Macroscopically, the textiloma was consisting of a surgical field of 30cmx30cm (Figure 3).

The further surgical was simple. The reintegration surgical of the colostomy by elective approach was done 3 months later.

---

<sup>1</sup>Visceral surgery service UHC Antananarivo Madagascar

<sup>2</sup>Thoracic surgery service UHC Antananarivo Madagascar

<sup>3</sup>Urological surgery service UHC Antananarivo Madagascar

**Corresponding author:** Dr Rakotomena

Solonirina Davida

rakotomenadavida@yahoo.fr

Tel : + 261 33 11 322 72

### Discussion

Textiloma consists on a foreign body made of compress (s) or surgical field(s) left at an operative site. It is a rare iatrogenic lesion of surgery with a prevalence of 0.02% to 0.1 % of interventions [1,2]. The textiloma of a gynecological surgery constitutes 22% of all surgeries combined [1].

**Figure 1: Intra-rectal foreign body delivered by the anus**



**Figure 2: Extraction of the textiloma through the sigmoid fistula during a laparotomy**



Like any foreign body, the textiloma can cause a highly exudative peritoneal reaction leading to generalized peritonitis or sometimes a deep chronic suppuration or an abscess [3]. The abscess can break into free peritoneum giving peritonitis, or into a neighboring viscera, or the skin creating parietal suppuration or even evisceration, and can heal spontaneously with extraction of the textiloma [4]. The textiloma can also create an aseptic fibrous encystment with sometimes long tolerance associated with calcifications and an inflammatory granuloma [5].

In our patient, the chronic inflammation around the textiloma had created rather early, in an afebrile context, an inflammatory granuloma associated with agglutination of the bowels. This all carried out a real gangue complicated with a ileo-sigmoid fistula, followed by the penetration of the textiloma through the fistula and its migration in the rectum.

The textiloma can be asymptomatic for many years explaining fortuitous discoveries during radiological exploration or surgery for another indication [4,6]. The diagnosis is often delayed by its various and nonspecific clinical manifestations such as vague repeated pain, chronic transit disorders, general deterioration of the state, evisceration, intra-abdominal pseudo-tumor, occlusion, acute peritonitis, parietal suppuration, or digestive fistula [5,6]. The imagery of the abdomen without preparation is not very contributive because it is most often normal. However, it may be conclusive when radiopaque marker, such as barium sulfate or wire in the forgotten tissue, is visualized [3,7]. In our case, radiography of the abdomen revealed only an acute intestinal obstruction of colic origin. The textiloma has multiple echographic and computed tomography aspects. Ultrasonography may show an echogenic formation image corresponding to inflammatory granuloma, associated or not with posterior shadows reflecting calcifications, which are often non-existent [1,7]. The textiloma may have a well-defined hypoechogenic cystic appearance with serpiginous and striped hyperechogenic internal structures, or a spongy appearance by the presence of multiple air bubbles encased in extra-digestive or intra-lesional textile meshes [3].

Computed tomography may note a well-encapsulated cystic formation with a slightly irregular wall and heterogeneous abscess-like content, or reveal fluid collections associated with hyperdense internal banded structures and air bubbles [6]. The image of the textiloma can simulate a well-defined tumor with contrast-enhancing dense wall, a fairly characteristic of content which is wave or serpiginous or whirlwind-like attributed to the different levels of textile disintegration [3,5]. Further, computed tomography allows precise preoperative topographic diagnosis and complete exploration of the abdominal cavity in search for complications (fistulas, pneumoperitoneum, abscess) [1]. In case of doubt, the MRI allows a three-dimensional study of the textiloma specifying its lesional components, its location and its topographic relations [8]. The diagnosis of the textiloma is confirmed macroscopically during the surgery and the histopathological examination with highlighting of a foreign body reaction with giant cells [1,7]. The main differential diagnoses mentioned are intestinal lymphoma, peritoneal tuberculosis, colonic adenocarcinoma, hydatid cyst, uracic tumor, abscess and hematoma [6,9].

The spontaneous expulsion of an intra-rectal foreign body is exceptional. Manual trans-anal extraction is feasible in 50 to 60% of cases, but often difficult because of the volume, shape or migration of the textile into the sigmoid that traps him. The risk of complication is about 62.5%, such as mucosal abrasion, ulceration, rectal bleeding or anal incontinence [10]. Extraction with flexible endoscopy is an exceptional option, giving way to surgery in case of trans-anal extraction fail, digestive perforation or peritonitis [11,12]. A colotomy may be inevitable in the case of a large foreign body [7,10]. After re-intervention for textiloma extraction, digestive fistula, parietal suppuration and toxicinfectious shock deaths complicating postoperative peritonitis were reported [3].

## Conclusion

The fear of forgetting a compress or operating field on the operating site, currently recognized as a fault of responsibility of the surgeon, is still relevant. The iatrogenic lesions generated can be serious and sometimes fatal, often requiring a major reintervention of consequence. Standard imaging can guide the diagnosis in front of the patient's surgical history. Preventive measures such as systematic radiopaque marking of compresses, systematic counting of compresses at the beginning and the end of the procedure, and systematic radiography on the operating table in case of doubt are essential. However, the permanent care of the surgeon is the rule.

**Figure 3: Textiloma made of an operative field of about 30cm x 30cm**



## THANKS

The authors wish to thank the medical team of the University Hospital Center of Antananarivo (Madagascar) for their participation in the development of this article.

## ETHIC

The authors certify compliance with the international ethical standards of the Declaration of Helsinki, the originality of the article as well as the agreement of authors.

## CONFLICT OF INTEREST

There is no conflict of interest between the co-authors for this manuscript.

## References

1. I Serghini, A El Fikri, J Salim Lalaoui, M Zoubir, M Boui, M Boughanem. Textiloma abdominal: à propos d'un cas. Pan African Medical Journal. 2011 ; 9 : 10 – 4.
2. AR O'Connor, FV Coakley, MV Meng, SC Eberhardt. Imaging of retained surgical sponges in the abdomen and pelvis. AJR Am J Roentgenol. 2003 ; 180 ; 2 : 481-9.
3. D Hammoud, N Ammouri, G Rouhana, H Saad, H Hussein, C Abou Sleiman, M Haddad. Aspects radiologiques des textilomas. J Radiol. 2001 ; 82 : 913 – 6.
4. R Lebeau, B Diane, E Koffi, A Amani, JC Kouassi. Les corps étrangers après chirurgie abdominale à propos de 12 observations. Mali Médical. 2004 ; 19 ; 3- 4 : 8–12. 15.
5. MJ Llull, D Munoz Velez, F Hidalgo Pardo, CG Sanz-Gadea, JP Sancho , A Mus Malleu, I Torrens Darder, MO Moragues. Cuerpo extraño como pseudotumor renal en un paciente con poliquistosis renal. Arch Esp Urol. 2000 ; 53 : 831.
6. B Zango, D Rizet, L Cabaniols, G Laffargue. Textiloma rénal : à propos d'un cas. African Journal of Urology. 2005 ; 11, 1 : 66 – 68.
7. PKarila-Cohen, HKotobi,NWeber, SMerran.Textilomaabdominal.JRadiol. 2004 ; 85 : 17 – 20.
8. T Mochizuki, Y Takehara, K Ichijo, T Nishimura, M Takahashi, M Kaneko. Case report : MR appearance of a retained surgical sponge. Clin Radiol. 1992 ; 46 : 66 – 7.
9. P.Blanc, C.Breton,M.Bourbon,G.Burgard,G.Hugonnier,D.Kaczmarek,C. Regairaz. Textiloma preperitoneal se presentant comme une tumeur de l'ouraue : Cas clinique.Le journal de Coelio-chirurgie. 2013 ; 87: 53.
10. A Ousadden, K IbnMajdoub, H El Bouhaddouti, J Lamrani, K Mazaz, K AitTaleb. Corps étrangers colorectaux introduits volontairement. A propos de quatre cas. Annales de Médecine et de thérapeutique Amether. 2009 ; 1 ; 1 : 22 – 25.
11. DL Clarke, I Buccimazza, FA Anderson, SR Thomson. Colorectal foreign bodies. Colorectal Disease. 2005 ; 7 : 98 - 103.
12. JP Lake, R Essani, P Petrone, AM Kaiser, J Asensio, RW Jr Beart. Management of retained colorectal foreign bodies: predictors of operative intervention. Dis Colon Rectum. 2004 ; 47 : 1694-8.