Available online at www.elixirpublishers.com (Elixir International Journal)

Physiology and Anatomy

Elixir Physio. & Anatomy 123 (2018) 52044-52047

ISSN: 2229-712X

Textillomas after Digestive and Abdominal Surgery: About 5 Cases

I. Bouhout, T.Bouhout, R.Jabi and M.Bouziane

Department of General Surgery, Mohammed VI University Hospital, Faculty of Medicine and Pharmacy of Oujda, Mohammed First University, Oujda. Morocco.

ARTICLE INFO

Article history:

Received: 11 September 2018;

Received in revised form:

8 October 2018;

Accepted: 16 October 2018;

Keywords

Textiloma,

Gynecological Surgery,

Visceral Surgery,

Foreign Body.

ABSTRACT

The forgetfulness of foreign body after digestive and abdominal surgery, despite its rarity, remains a real challenge. Justifying the reputation of textilomas known as being difficult to diagnose. Training is needed to try to reduce this rare but serious complication. We report a series of 5 cases of abdominal and digestive tract textilomas collected over a period of 5 years in the department of visceral surgery and oncology of Oujda university hospital, with review of the literature on this issue.

1. Introduction

The textilome, also called gossypiboma (Latin Gossypium = cotton and swahili boma = hiding) is a rare postoperative complication, but known by its adverse consequences for the patient in terms of morbidity and mortality, as well as for the surgical team [1]. This is the oldest and most obvious mistake in surgery. [2] in which a foreign textile substance (surgical pad or surgical field) is accidentally left in the body of a patient during a surgical procedure.

The incidence varies from 1/833 to 1 / 32,672. However, the actual impact of this medical error is certainly higher, as fear of the legal repercussions of litigation prevents many practitioners from reporting. [2,3].

2. Patients and methods

Our work is a retrospective study reporting 5 cases of abdominal textilome and digestive tract collected over a period of 5 years in the department of visceral surgery and oncology of the University Hospital of Oujda, with review of the literature on the subject. It aims to update the diagnostic difficulties, the circumstances of occurrence, the seriousness of this complication and to propose means of prevention.

The 5 cases that were the subject of our work were selected on the basis of the following inclusion criteria:

•Diagnosis of abdominal textiloma or digestive tract formally established

• Comprehensive care of the patient by our team

• Recordable record.

We have excluded the following cases:

•Abdominal foreign body or digestive tract other than textillomas.

• Support outside our institution

• Inoperable file

3. Results

• Frequency

With 5 cases for a study period of 5 years, we can deduce an annual frequency of a case of abdominal textilome and the digestive tract

•Age

Our 5 patients were between 25 and 52 years old, an average age of 39.4 years

•Pathological antecedents

One of our patients was followed for Crohn's disease and operated for anal abscess 5 years ago. The other four patients had a cesarean section.

•Time of presentation

The average presentation time recorded in our patients was 5 years and 4 months (from 3 days to 20 years)

•Clinical presentation

4 cases, 80% presented for a febrile occlusive syndrome, making the latter the most represented symptom of our series. One case in our series (20%) presented itself for insomnia anal pain with several complex path anal fistulas.

•Paraclinic

The abdomen without preparation objectified hydro-aerial levels in 3 cases associated with granitic appearance of the left hypochondrium evoking a foreign body in 2 cases.

Two patients underwent Pelvi-perineal computed tomography, in one case showing a para-rectal (Figure 1) and abdominopelvic process in the second patient, which revealed a large abdominal cystic mass measuring 12.88. cm X 10.72 cm. (Figure 2)

Hyperleukocytosis was the only biological abnormality observed in 2 cases.

•Treatment

Therapeutically, an exploratory laparotomy was performed in all our patients. Surgical exploration revealed the presence of an operative field in 4 cases (Figure 3) (Figure 4), and a pseudo-tumor formation in a case whose textile nature was established only on anatomophatological examination. (Figure 5)

Three patients benefited from a simple extraction of the textilome.

And two patients benefited from a textilome extraction with resection anastomosis of the small intestine.

Tele: 00212672854691

E-mail address: dr.imad.bouhout@gmail.com

Figure 1. Pelvic-perineal CT showing a process of the para rectal lodge.

Figure 2. CT image showing a fluid mass of the left hypochondrium.

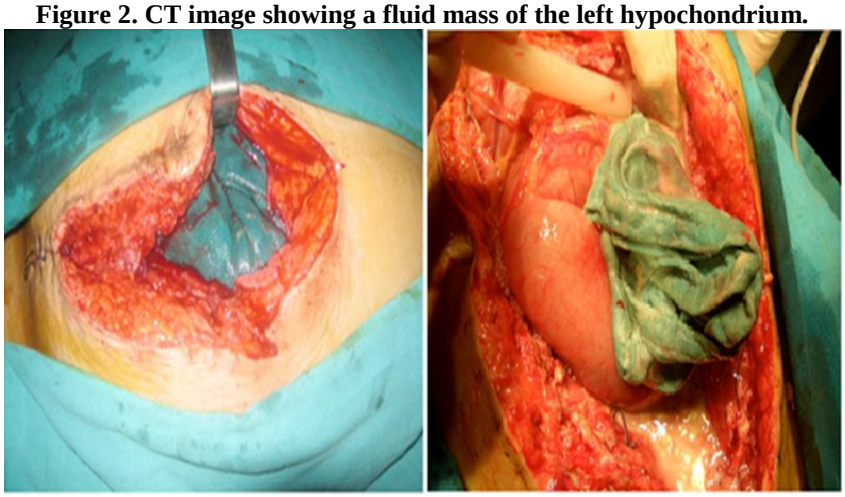

Figure 3. Intra-abdominal textillomas.

Figure 4. Pararectal textilloma.

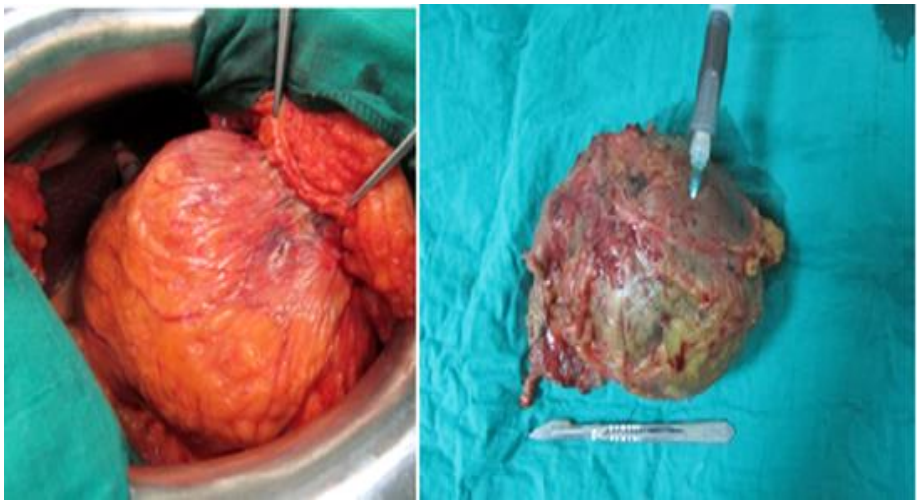

Figure 5. Pseudo-tumor aspect of an intra-abdominal textilloma.

Figure 6. check list in its 2011 version according to the Haute Autorité de Santé [12].

• Evolution

The follow-up was simple for all cases, except for a wall infection well controlled under antibiotic therapy in a single case.

4. Discussion

It is very difficult to establish the actual frequency of textilomes because not all observations are reported for fear of legal repercussions and partly because of some asymptomatic forms that often go unnoticed. [2,3]

In most of the articles consulted, we find a frequency of foreign bodies forgotten after surgery of between 0.001% and 0.01%, of which textilomes account for 80% of cases.

Two types of textillomas are usually encountered: the so-called "tetra" or abdominal field, the gauze pad, and more rarely a wick. Usually it is the compress that is more often forgotten and this in 87% of the cases

Digestive and gyneco-obstetric surgery are the most concerned, followed by vascular and urological surgery.

In our case, it is the gynecological surgery that is mainly concerned.

The risk factors of the textilomes are multiple and are mainly related to the methodical organization of the operating room as well as to the emergency context, including the unexpected change of the operative protocol, the important bleeding, or a counting error of the compresses. [6,7]

The presence of a textile foreign body accidentally left in the abdominal cavity during a surgical procedure will generate polymorphic disorders none of which is specific.

Clinically, we distinguish between early-onset forms dominated by infectious tables such as: septic shock, localized or generalized peritonitis, but also after hemorrhage or occlusion, [8] and late-onset forms that represent between 30 and 50% of the cases of textilomes. In these forms, the delay between the initial operation and the appearance of the disorders is several years. [6] The textilome can lead to the formation of adhesions, encapsulation, cyst formation,

fistulae or direct migration to digestive lumen, gastrointestinal bleeding or even remain asymptomatic. [7.9].

Paraclinically, the role of the radiologist is very important in establishing the preoperative diagnosis of textilomas. This can be easily carried to the abdomen without preparation when the compresses are endowed with radio-opaque character or when the observation of certain evocative images: an opacity containing a banded structure corresponding to textile fibers, a "marshy" aspect, or the presence of calcifications although these can be taken for calcified tumors. [10,11]

Computed tomography remains the technique of choice for detecting textilomes and its possible complications. The textilome is revealed in the form of a rounded formation, well defined net, of a spongy aspect "in honeycomb". The center of the lesion contains hyperdense serpiginous banded structures.

MRI provides a complete study of the components of the lesion as well as these topographic relationships.

Finally The anatomopathological study of the operative specimen confirms the diagnosis by affirming the textile nature of the foreign body and shows "the reaction to foreign body.

No method seems foolproof to avoid forgetting a field or a compress. However, a number of measures can significantly reduce this risk. These measurements can be either of a material nature, in particular by the use of radiopaque markers on surgical compresses coupled with the use of X-rays, or of a technical order based on a rigorous discipline. The surgical count and the use of Check List (Figure 6). [12,13] The latter is a program that reduces postoperative morbidity and mortality by nearly 30% and that is based on a shared verification within the team of a series of criteria considered essential for any surgical intervention. .

Textilomas can lead to serious medico-legal problems especially for surgeons. In Morocco, the courts consider the forgetting of compresses or instruments as being a heavy fault, resulting in the condemnation of the practitioner. This is supported by Articles 78 and 79 of the Code of Obligations and Contracts as well as 432 and 433 of the Moroccan Penal Code.

5. Conclusion

At the end of our study, we can see that, in many respects, the neglect of textile foreign bodies after digestive and abdominal surgery, despite its rarity, remains a real challenge. Justifying the reputation of textilomes known as being difficult to diagnose. The surgeon, the team, and the care establishment are responsible in case of forgetfulness of compresses or surgical drapes. Training and awareness of all staff is needed to try to reduce this rare but serious complication.

Conflict of Interest

The authors do not declare any conflict of interest.

References

[1] Mercier M, Noailles T, Sali E, Carret P, Duvauferrier R, Rouvillain JL. What type of imaging work-up will help to confirm the diagnosis of gossypiboma in the limb? Review of literature. OTSR. 2016;102:795-800.

[2] Greenberg CC, Regenbogen SE, Lipsitz SR, Diaz-Flores R, Gawande AA. The frequency and significance of discrepancies in the surgical count. Ann Surg. 2008; 248(2):337- 41.

[3] Issam Serghini, Abdelghani El Fikri, Jaafar Salim Lalaoui, Mohamed Zoubir, Mohammed Boui, Mohamed Boughanem. Abdominal textiloma: report of a case. Pan Afr Med J. 2011; 9:10.

[4] Gawande AA, Studdert DM, Orav EJ, Brennan TA, Zinner MJ. Risk factors for retained instruments and sponges after surgery. N Engl J Med. 2003; 348(3):229-35.

[5] Rowlands A. Risk factors associated with incorrect surgical counts. AORN J. 2012; 96 (3):272-84.

[6] Andronic D, Lupascu C, Târcoveanu E, Georgescu S. Gossypiboma-retained textile foreign body. Chirurgia (Bucur). 2010; 105(6):767-77.

[7] Rajkovic Z, Altarac S, Papes D. An unusual cause of chronic lumbar back pain: retained surgical gauze discovered after 40 years. Pain Med. 2010; 11(12):1777-9

[8] Rasoaherinomenjanahary F., Ranoharison D. H., et Samison LH. Abdominal foreign body textiloma: Imaging and operative appearance. Journal of visceral surgery, 2017; 154 (6):463.

[9] Wan W, Le T, Riskin L, Macario A. Improving safety in the operating room: a systematic literature review of retained surgical sponges. Curr Opin Anaesthesiol. 2009; 22(2):207-14.

[10] Rajput A, Loud P, Gibbs J, Kraybill W. Diagnostic challenges in patients with tumors. J Clin Onco. 2003;21:3700–5.

[11] Millán, OO, Leiro JV, Antelo JS, Álvarez CÁ. Textiloma: en el diagnóstico diferencial de masas abdominales. Clínica e Investigación en Ginecología y Obstetricia. 2009 ;36(6), 219-222.

[12] Gueguen, T, Coevoet V, Mougeot M, Pierron A, Blanquart D, Voicu M, Mertes PM. Déploiement de la check-list «Sécurité du patient au bloc opératoire» dans deux hôpitaux lorrains. Performances et difficultés. Annales françaises d'anesthésie et de réanimation. 2011; 30(6):489-494)

[13] Chambi I, Tasker RR, Gentili F, et al. Gauze-induced granuloma (‘‘gauzoma’’): an uncommon complication of gauze reinforcement of berry aneurysms. J Neurosurg 1990; 72:163-70