



Breast Textiloma: An unending medico-legal issue about a case report



Marwa Boussaid^a, Med Amin Mesrati^{a,*}, Rania Jouirou^a, Nouha Abdejlil^c, Abdelfeteh Zakhama^c, Ali Chadly^b, Abir Aissaoui^a

^a Department of Forensic Medicine, Taher Sfar Hospital, Mahdia, Tunisia

^b Department of Forensic Medicine, Fattouma Bourguiba Hospital, Monastir, Tunisia

^c Department of Pathology, Fattouma Bourguiba Hospital, Monastir, Tunisia

ARTICLE INFO

Article history:

Received 24 February 2017

Accepted 4 March 2017

Available online 7 March 2017

ABSTRACT

INTRODUCTION: Textiloma is a mass composed of retained surgical textile foreign body. It is a rare iatrogenic complication that can engage the doctor's responsibility. The aim of this manuscript is to report an unusual case of breast Textiloma mimicking a recurrent tumor and to highlight its medico-legal implications.

PRESENTATION OF CASE: A 47-year-old lady, without past medical history, was diagnosed with a breast infiltrating intraductal carcinoma. She was treated with mastectomy. Four years later, the patient consulted her surgeon for a subcutaneous mass in the operative site. Both medical and radiological investigations concluded to recurrent tumor. Histological examination confirmed the diagnosis of Textiloma.

DISCUSSION: Retained foreign bodies in the operative site are infrequent but serious iatrogenic complications. Clinical manifestations of Textiloma are variable and non-specific. It should be suspected in any postoperative case with unresolved or unusual problems. It can mimic other conditions such as tumor. Textiloma is a frequently injurious situation that can lead to medico-legal implications. It is considered to be a sample of medical negligence that involves the surgeon responsibility.

CONCLUSION: Textiloma is a preventable condition and it can be avoidable by maintaining standard recommendations.

© 2017 The Authors. Published by Elsevier Ltd on behalf of IJS Publishing Group Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Textiloma (from Greek textile and *ome* = tumour) called also Gossypiboma (from Latin *Gossypium* = cotton and Swahili *boma* = hiding place), is defined as the retention of textile foreign body following surgery [1]. It is an uncommon but avoidable iatrogenic complication which must be kept in mind in any postoperative patient who presents with palpable mass, pain or infection [2]. It can cause serious morbidity and even mortality [3]. The diagnosis is difficult because the symptoms are usually variable and non-specific. However, it may remain asymptomatic for years or never discovered [4]. Data concerning the incidence of Textiloma is underestimated. The most common cases occur after abdominal or thoracic surgery but rarely after breast surgery [5]. Forgetting foreign bodies after any surgical procedures may lead to undesired and disappointing consequences for the surgeon. The medico-legal implications are high and significant. Patients may be inadvertently informed that masses might be malignant and may undergo investigations or unnecessarily operations [6].

We report an unusual case of breast Textiloma mimicking a recurrent tumor and we highlight medico-legal implications.

2. Presentation of case

A 47-year-old lady, without past medical history, was diagnosed with a breast infiltrating intraductal carcinoma. She was treated with mastectomy and adjuvant chemo radiotherapies. Four years later, the patient consulted her surgeon for a subcutaneous mass in the operative site. The physical examination found a palpable hard painless mass near the surgical scar. Ultrasonography showed a heterogenous mass. Both medical and radiological investigations concluded to recurrent tumor. The patient underwent surgery. Macroscopic exploration revealed an adherent whitish mass, measuring 5 × 5 cm with sclerotic consistency. The section showed a spong (Fig. 1). The histological examination confirmed the diagnosis of Textiloma and noted granulomatous inflammation with multinucleated foreign body type of giant cell infiltration around textile fibres (Figs. 2 and 3).

3. Discussion

Retained foreign bodies in the operative site are infrequent but serious iatrogenic complication, first described by Wilson in 1884.

* Corresponding author at: Department of Forensic Medicine, Taher sfar Hospital, Mahdia 5100, Tunisia.

E-mail address: mesrati.amin@gmail.com (M.A. Mesrati).



Fig. 1. A well limited mass centered by a spong.

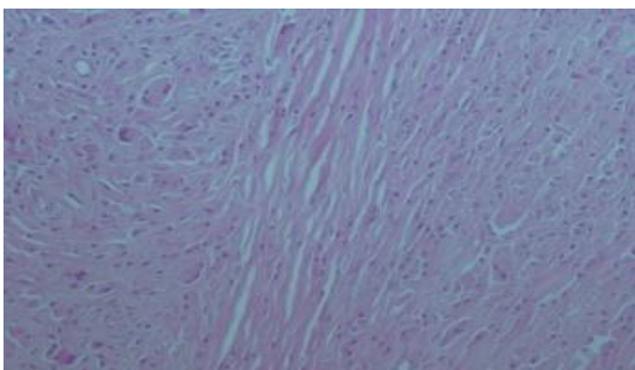


Fig. 2. Fibrous connective tissue composed of multinucleated cells.

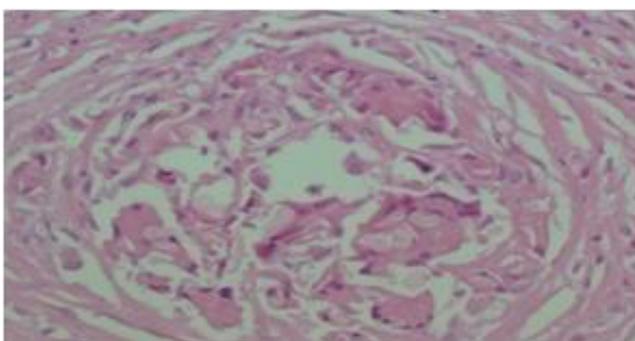


Fig. 3. Multinucleated cells surrounding textile fibres.

Since then many cases had been reported, but the real incidence is still underestimated because of the under-reporting cases due to fear of legal concerns [7]. The reported incidence of missed bodies following surgery is of 0.01%–0.001%, of which surgical sponge is considered to be the most frequently forgotten object because of its common use, size and amorphous structure [8]. Other surgical materials may similarly be missed in the body such as scissors, rubber materials and pieces of broken instruments... The most common cases of Gossipyboma occur after abdominal or thoracic surgery but rarely after breast surgery like in this case [5]. Many risk factors have been recorded as most significant favouring the occurrence of Textiloma, such as high body mass index, an unexpected emergency surgery with profuse bleeding, unplanned change in operation, inadequate attention to sponge count, unstable patient condition and inexperienced staff [9].

Clinical manifestations of Textiloma are variable and non specific. It should be suspected in any postoperative case with unresolved or unusual problems [3]. It can mimic other conditions such as tumor, abscess, pseudo-cysts or hematoma [10]. Thus, the

diagnosis can be misinterpreted. Frequently, it is a per-operative diagnosis like in the reported case. In fact, the patient complained only of a mass in the operative scar. A recurrent tumor was suspected and a radical extirpative operation was performed.

Histologically, gossipyboma induces two different types of body responses: exudative which can lead to infection and abscess formation, so the presentation may be acute (within months) or aseptic fibrous which can present in the form of adhesion or encapsulation within years [3]. Alternatively, retained sponges may remain undiscovered for decades [6]. According to our knowledge, the interval between the probable causative surgery and the diagnosis of retained gauze reported in the literature range from 11 days to 67 years [11].

Textiloma is an avoidable and frequently injurious situation that has many medico-legal implications [3]. It was stated as the classic example of medical negligence in which an expert failed to achieve the standard of care required [6]. Professional negligence is defined as the breach of duty caused by the omission to do something that a reasonable man, guided by those considerations which ordinarily regulate the conduct of human affairs, would do, or doing something that a prudent and reasonable man would not do [3].

Nowadays, patients are more aware of their rights and they are filing more cases against doctors in courts. The presence of a sponge inside the body may be easily proved and the patient can litigate the responsible surgeon who will face charges of negligence. The claims about medical malpractice can be usually subject to trials in both of penal judgment and compensation trial [12].

The doctor can be made liable in civil law for paying compensation and damages [3]. Covering the indemnity can be insured by professional insurance for doctors or medical establishments. This situation requires the association of the existence of damage, a committed fault and a cause effect relationship. As stated in the article 245 of the Tunisian civil code, the doctor may be responsible of his own fault and even the mistake of his subordinate, for example when a caregiver fouls during counts of the sponges. According to the theory of loss-of-chance, the damage of patient is the loss of the chance of survival or recovery; and there would be a compensation for this loss [6]. However, while the patient can prove the accident, he cannot prove how it happened to establish negligence on the part of the surgeon [3]. Thus, regarding these difficult cases, the doctor can be exonerated or considered to be a minor contributor in this drama.

The Supreme Court in Pushpabhai Purshottam Udeshi&Ors has stated the principle of “*res ipsa loquitur*” to facilitate procedures and compensation to victims [13]. The general purport is that the accident “speaks for itself” or tells its own story. The patient has to prove the incident and nothing more. The doctor should establish that the accident happened due to some other cause than his own negligence [14].

When the patient had undergone many surgeries, the responsibility arises generally for the last operator. Or, the same surgical site may have been approached by two different operators in more than ten years of interval. In this case, the question is that the sponge was forgotten at the last intervention, or even earlier? Thus, the victim has to prove what intervention is causing the damage.

Furthermore, if the degree of the negligence is so gross and the doctor's act is careless as to endanger the life of the patient, he would be also made criminally liable [3]. According to the Tunisian Criminal Code (TCC), doctors can be prosecuted under section 225 (involuntary assault by negligence or inattention) which is punishable with imprisonment for a term that may extend to 1 year. They are also being punished for involuntary homicide, if death occurs, under section 217 of the TCC.

In the reported case, a legal action against the surgeon was not started. The patient was not informed about the real diagnosis and she thought having a recurrent tumor, reasons for this are related

to the fear of litigation which could end up in heavy expenses and jeopardize the reputation of the surgeon among public or his professional colleagues. This can arise several questions from legal and ethical point of view.

Prevention of gossypiboma can be done by maintaining standard recommendations [3]. It can be avoidable by keeping a thorough count of the sponges at least twice by at least two people (before surgery and before closure of the wound), especially during emergency operation [15]. In case of missing sponge, a radiological exam is indicated. Moreover, using small sponges is not recommended. However, using sponges with radiopaque markers is highly recommended according to The 2009 World Health Organization guidelines for safe surgical procedures. Furthermore, it's important that the surgeon keep calm and know how to deal with stressful and emergency situations, the operating room team must pay thorough attention to details.

In spite of continual improvement in surgical procedures and the technical evolution aimed at protecting patients in the operating room, textiloma is unlikely to be completely eliminated [9].

Conflict of interest

No conflict of interest.

Funding

No sources.

Ethical approval

No ethical issues.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

Author contributions

Study concept: Mesrati Mohamed amine.

Data collection: nouha abdejlil, abdelfeteh zakhama.

Writing the paper: boussaid marwa.

Grammatical correction: ali chadly, abir aissaoui.

Registration of research studies

None.

Guarantor

Mesrati Mohamed amine.

References

- [1] K.K. -Patil, S.K. Patil, K.P. Gorad, A.H. Panchal, S.S. Arora, R.P. Gautam, Intraluminal migration of surgical sponge: Gossypiboma, Saudi J Gastroenterol. 16 (2010) 221–222.
- [2] A.I. -Okten, M. Adam, Y. Gezercan, Textiloma: a case of foreign body mimicking a spinal mass, Eur. Spine J. 15 (2006) 626–629.
- [3] R.S. -Biswas, S. Ganguly, M.L. Saha, S. Saha, S. Mukherjee, A. Ayaz, Gossypiboma and surgeon— current medicolegal aspect—a review, Indian J. Surg. 74 (2012) 318–322.
- [4] M. -Turgut, O. Akyuz, Y. Ozsunar, F. Kacar, Sponge-induced granuloma (gauzoma) as a complication of posterior lumbar surgery, Neurol. Med. Chir. (Tokyo) 45 (2005) 209–211.
- [5] M. El Khoury, F. Mignon, A. Tardivon, Retained surgical sponge or gossypiboma of the breast, Eur. J. Radiol. 42 (2002) (58–6).
- [6] M. -Garg, A.D. Aggarwal, A review of medicolegal consequences of gossypiboma, J. Indian Acad. Forensic Med. 32 (2010) 358–361.
- [7] S.P. Kataria, M. Garg, S. Marwah, D. Sethi, Post-operative adhesive intestinal obstruction from gossypiboma, Ann. Med. Health Sci. Res. 2 (2012) 206–208.
- [8] H.S. Kim, T.-S. Chung, S.H. Suh, S.Y. Kim, MR imaging findings of paravertebral gossypiboma, AJNR Am. J. Neuroradiol. 28 (2007) 709–713.
- [9] J. -Ummuna, Gossypiboma and its implications, J. West Afr. Coll. Surg. 2 (2012) 95105.
- [10] R.F. Coelho, A.I. Mitre, M. Srougi, Intrarenal foreign body presenting as a renal calculus, Clinics (Sao Paulo) 62 (2007) 527–528.
- [11] N. Grassi, C. Cipolla, A. Torcivia, A. Bottino, E. Fiorentino, L. Ficano, G. Pantuso, Trans-visceral migration of retained surgical gauze as a cause of intestinal obstruction: a case report, J. Med. Case Rep. 2 (2008) 17.
- [12] Pushpabhai Purshottam Udeshi & Ors. vs. M/s Ranjit Ginning & Pressing Co. (P) Ltd. & Anr., (1977) 2 SCC 745.
- [13] M.K. Garg, M.T. Zeya, G. Uma, G. Sunder, Y. Mukesh, Gossypiboma a diagnostic dilemma or medical negligence a case report, J. Indian Acad. Forensic Med. 36 (2014) 100–103.
- [14] Gumus M. Gumus, A serious medico-legal problem after surgery: gossypiboma, Am. J. Forensic Med. Pathol. 33 (2012) 54–57.
- [15] I. Tacyildiz, M. Aldemir, The mistakes of surgeons: “gossypiboma”, Acta Chir Belg 103 (2003) 71–75.

Open Access

This article is published Open Access at sciedirect.com. It is distributed under the [IJSCR Supplemental terms and conditions](#), which permits unrestricted non commercial use, distribution, and reproduction in any medium, provided the original authors and source are credited.