ACTA MEDICA SALINIANA

CASE REPORT

GOSSYPIBOMA IN ARMPIT DIAGNOSED AS REPEATED MALIGNITY

Azur Latifagić[1], Alena Kumbara[2]

ISSN 0350-364X

DOI: 10.5457/627

Azur Latifagić
Alena Kumbara

ABSTRACT

It is not unusual for surgical material, usually surgical gauze, to remain in the body after surgery. It is usually found inside the patient's thoracic, abdominal or pelvic cavity. In our paper, we report a unique case of Gossypiboma found in the axilla of a female patient, 14 years after myxosarcoma surgery. A 57-year-old patient was referred from primary health care to our hospital after she noticed a change in her left axillary fossa. During the clinical examination, a solid, painless nodule was recorded, which was diagnosed by CT as a repeated malignancy. After the surgical treatment, a pathohistological examination of the sample revealed a cystic formation, size 115 x 100 x 100 mm, with surgical gauze firmly attached to the inner wall of the cyst. To our knowledge, this is the first case describing gosypiba in this part of the body.

Key words: textile, gossipiboma, foreign body, surgery.

INTRODUCTION

Gossypiboma or Textiloma is a term used to describe the mass of retained surgical material, most commonly surgical gauze, left inside the body after surgery, followed by the reaction of the surrounding tissue to the foreign body present [1, 2]. It is most commonly found in large body cavities such as the thoracic cavity, abdominal cavity, or pelvis, [3], and is extremely rare in other parts of the body, such as the extremities [4] and mouth [5, 6]. Two common responses lead to the discovery of retained material. The first type is an exudative inflammatory reaction with the formation of an abscess and usually leads to early detection and surgical removal. The second type is aseptic, with a fibrous reaction to cotton material and the development of soft tissue mass [7]. In this in this scientific paper, we describe a case of asymptomatic retained surgical gauze, discovered in the axilla 14 years after myxosarcoma surgery.

CASE REPORT

A 57-year-old female patient was admitted to our hospital after noticing a change in her left axillary fossa. During the examination, the presence of a stationary, firmly attached, painless nodule under the left arm was established, which was diagnosed by CT as a recurrent malignancy. (Tumor axillae lateralis sinistri recurrence). The patient had no other symptoms. Previously, at the same site, she had a tumor that was surgically removed 14 years ago. The pathohistological diagnosis of the tumor was: "Myxosarcoma gradus 1 (low grade) pT2a". Based on the anamnesis and findings, surgical treatment is indicated. During the surgical treatment of the left axillary pit, performed under general anesthesia, a bizarre-looking tumor, the size of a melon, was completely removed (Extripatio tumoris in totto). The sample was sent for pathohistological analysis to Department of pathology with prosecution "Prim.Dr. Abdulah Nakaš", macroscopic examination, the tumor appears to have an intact cystic formation, measuring 115 x 100 mm, with a smooth, partly uneven surface. According to the longitudinal section, the cystic formation is a wall 2 to 10 mm thick (Figures 1 and 2), mostly of a smooth luminal surface, where in one focus a solid, partly dilapidated patchy foreign body, yellowish in color, is observed. The lumen of the cystic formation is filled with a dark, yellowish fluid. A closer inspection of a foreign body established that it was a surgical gauze, left over from the operative treatment 14 years ago After microscopic examination, the pathohistological diagnosis was: "Granuloma corporis alieni textus mollis et musculi striati precipituae cystica". After postoperative follow-up, four days later the patient was discharged home, in good health.

Affiliations:
1Department of Pathology with Prosecution, "Prim.Dr. Abdulah Nakaš",
2Department of Pathology with Prosecution, "Prim.Dr. Abdulah Nakaš"

Received:
21.11.2021.

Accepted:
13.2.2023.

Corresponding author:
Azur Latifagić
Email. azur.latifagic@obs.ba

Funding: none

Competing interests: none

Figure 1. Cystic formation with patchy foreign body removed from left axillary fossa.

Figure 2. A closer view of a patchy foreign body within a cystic formation.

DISCUSSION

It is difficult to determine precisely the incidence of Gossypiboma because there are insufficient reports of these cases due to possible consequent medical-legal problems [7]. Most of the available data refer to abdominal-pelvic Gossypibomes in which the incidence of occurrence varies significantly from 1: 1000 - 1: 1500 [8] to 1: 5027 [9]. Objects left in the extremity are often present in the form of soft tissue, which can be confused with neoplasma [10]. Patients with retained foreign bodies were found to be more likely to have emergency surgery, an unexpected change in surgery, or a higher body mass index [11]. Depending on their nature, they are classified into acute and chronic, and in both cases, the symptoms disappear after the operation. In the acute form, patients usually have early postoperative symptoms such as abscess formation and fistula. In the case of chronic forms of Gossypiboma, they usually appear as encapsulated granulomas that are not detected for a long time, because they are asymptomatic or show some non-specific symptoms [12, 13]. They are accompanied by a slow reaction to a foreign body with the formation of granulomas [14]. In this case, it was an asymptomatic, chronic Gossypiboma, immobile in the axillary pit of the patient, which did not cause a biochemical reaction or inflammation for 14 years.

There are several ways to minimize the possibility of these events, the use of radio frequency devices has proven to be very useful. The applied surgical material is marked preoperatively, and it is detected and removed at the end of the surgical procedure by scanning the surgical field [15]. Unfortunately, such a device is not available in our country. Another, much simpler method is a careful surgical counting protocol, in which all the material used during the surgical procedure is counted before and after the procedure. The number of materials should be equal preoperatively and postoperatively, otherwise the surgeon approaches a detailed inspection of the operative field [16].

The first radiological modality in diagnosing gossypiboma is CT. However, the appearance of gossypiboma on CT is highly variable depending on its anatomical location and the chronicity of retained foreign materials. According to earlier reports, CT was informative in only 61% of gossypiboma cases, indicating that radiological verification alone may not be sufficient to establish the diagnosis. [17]. A comprehensive interpretation of history, radiological images and a highly suspicious clinical picture are necessary to diagnose gossypiboma. Once gossipib is diagnosed, surgical removal is necessary. As accurate preoperative diagnosis is difficult to achieve, most patients require surgical intervention to fulfill both diagnostic and therapeutic purposes. [18].

CONCLUSION

Despite precautions, Gossypiboma persists and should be considered a differential diagnosis in patients with a history of previous surgery. Particular attention should be paid to the occurrence of symptomatic or asymptomatic palpable masses at the site of previously translated surgical treatment of malignancy in order to suppress the replacement of Gossypibom with a recurrent neoplasm. The appearance of Gossypiboma can have unforeseeable consequences on the life and health of the patient, and the professional reputation of the surgeon. It is necessary to continuously seek and implement additional preventive measures, and monitor the progress of foreign body detection technology in order to prevent human error during the operation.

REFERENCES

1. Atabey C1, Turgut M, Ilica AT. Retained surgical sponge in differential diagnosis of paraspinal soft-tissue mass after posterior spinal surgery: report of eight cases. Neurol India. 2009; 57: 320-323
2. Takashi Kobayashi,corresponding author1 Naohisa Miyakoshi,2 Eiji Abe,1 Toshiki Abe,1 Tetsuya Suzuki,3 Masato Takahashi,4 et al. Gossypiboma 19 years after laminectomy mimicking a malignant spinal tumour: a case report. J Med Case Rep. 2014; 8: 311.
3. Kim CK1, Park BK, Ha H. Gossypiboma in abdomen and pelvis: MRI findings in four patients. AJR Am J Roentgenol. 2007; 189: 814-817.
4. Kominami M1, Fujikawa A, Tamura T, Naoi Y, Horikawa O. Retained surgical sponge in the thigh: report of the third known case in the limb. Radiat Med. 2003: 21: 220-222.

5. Pons Y, Schouman T. Maxillary sinus textiloma: a case report. J Med Case Rep. 2010; 4: 288.
6. Sigron GR, Locher MC. A gossypiboma (foreign body granuloma) mimicking a residual odontogenic cyst in the mandible: a case report. J of Med Case Rep. 20115; 211.
7. Gibbs VC1, Coakley FD, Reines HD. Preventable errors in the operating room: retained foreign bodies after surgery--Part I. Curr Probl Surg. 2007; 44: 281-337.
8. Silva SM1, Sousa JB. Gossypiboma after abdominal surgery is a challenging clinical problem and a serious medicolegal issue. Arq Bras Cir Dig. 2013; 26:140-143.
9. Bani-Hani KE1, Gharaibeh KA, Yaghan RJ. Retained surgical sponges (gossypiboma). Asian J Surg. 2005; 28: 109-115.
10. SP Stawicki, CH Cook, Anderson HL 3rd et al., "Natural history of retained surgical items supports the need for team training, early recognition, and prompt retrieval," American Journal of Surgery, 2014; 208 (1): 65–72.
11. Gawande, DM Studdert, EJ Orav, TA Brennan, and MJ Zinner, "Risk factors for retained instruments and sponges after surgery," The New England Journal of Medicine, 2003; 348 (3): 229–235.
12. Aydogan M1, Mirzanli C, Ganiyusufoglu K, Tezer M, Ozturk I. A 13-year-old textiloma (gossypiboma) after discectomy for lumbar disc herniation: a case report and review of the literature. Spine J. 2007; 7: 618-621.
13. Is M1, Karatas A, Akgul M, Yildirim U, Gezen F. A retained surgical sponge (gossypiboma) mimicking a paraspinal abscess. Br J Neurosurg. 2007; 21: 307-308.
14. Kucukyuruk B, Biceroglu H, Abuzayed B, Ulu MO, Kafadar AM. Paraspinal gossybipoma: A case report and review of the literature. J Neurosci Rural Pract. 2010; 1: 102–104.
15. Steelman VM1, Alasagheirin MH. Assessment of radiofrequency device sensitivity for the detection of retained surgical sponges in patients with morbid obesity. Arch Surg. 2012 ;147: 955-960.
16. Cima RR1, Kollengode A, Garnatz J, Storsveen A, Weisbrod C, Deschamps C. Incidence and characteristics of potential and actual retained foreign object events in surgical patients. J Am Coll Surg. 2008; 207: 80-87.
17. 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: 207-214
18. Choptra S, Suri V, Sikka P, Aggarwal N. A case series on gossypiboma - varied clinical presentation and their management. J Clin Diagn Res. 2015; 9: QR01-QR03