

A Foreign Body Granuloma in the Neck Mimicking Metastatic Tumour: A Lesson to Learn

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Citation

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Abstract

A considerable number of articles on retained gauze in the abdomen and thoracic have been reported in the literature. Of these, retained gauze swab in the neck has not been previously reported. We present the case of a 41-year-old man who had persistent right neck swelling of nine months duration following excision of a right cheek tumour and pectoralis major flap reconstruction. Routine haematological investigations including ESR, Mantoux test and Chest X-ray were normal. Cytological examination was consistent with chronic granulomatous lesion while CT scan features were suggestive of metastatic disease. Neck exploration eventually revealed a gauze swab that was left inside his neck. Our aim is to raise awareness amongst surgeons and to improve operating-room etiquette.

INTRODUCTION

Retained objects in surgical sites, although unusual, remain a clinical problem despite precautions taken by surgeons. Reports of retained objects in the neck have never been published in the literature. The aim of this case report is to alert surgeons and health care providers of this preventable complication.

CASE REPORT

A 41-year old man had a right pectoralis major flap reconstruction of a right cheek defect following excision of dermatofibrosarcoma protuberans. This surgery was performed elsewhere. After the procedure he complained of right neck swelling which gradually increased in size over nine months. There was intermittent purulent discharge from a sinus. However there was no associated pain or fever.

Examination revealed right neck swelling measuring 10 x 10 cm with purulent discharge from a sinus. The mass was firm, mobile and non-tender. There were no other palpable mass in the neck region. Ear, nose and throat examination were normal. On the right cheek there was healed surgical wound and a healthy pectoralis major flap.

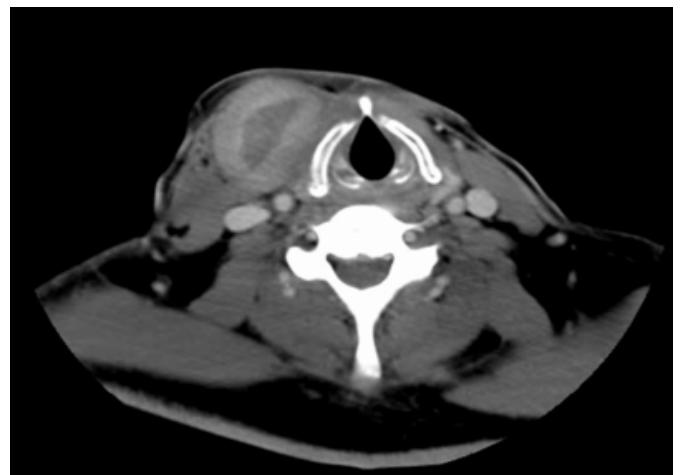
Routine haematological investigations were normal; TWC $6.5 \times 10^9/l$, Hb 15.1g/dl and ESR was 17 mm/hr. The Mantoux test and AFB (acid fast bacilli) culture were negative. Chest radiograph was also normal. Fine needle aspiration cytology was suggestive of chronic granulomatous

inflammation.

Computed tomography scan revealed a smooth surface mass with central cystic component and was reported as metastatic tumour (Fig 1). A decision to perform neck exploration was made.

Figure 1

Figure 1: Axial CT scan at glottic level showing a mass in the right neck with a central hypodense area.

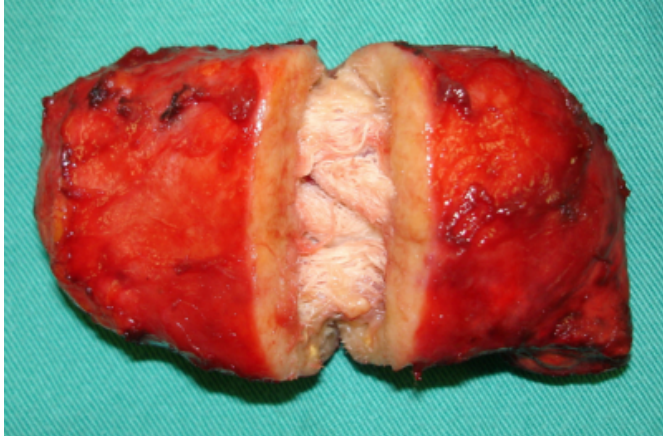


Intraoperatively, there was a single mass lying beneath the pectoralis major flap and anterior to the sternocleidomastoid muscle. It was well encapsulated and there was no lymph node enlargement noted. Excision of the mass was attempted. Upon cutting the mass, we were surprised to find

a gauze swab within the mass (Fig 2).

Figure 2

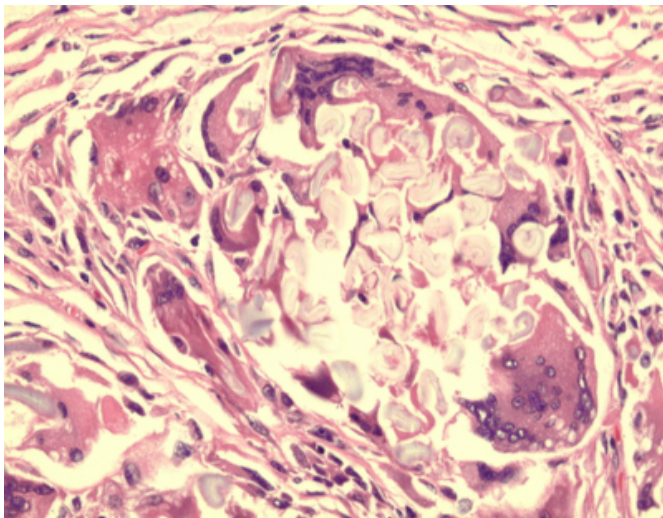
Figure 2: Gauze swab inside the mass. There is no abscess and it has a thick capsule.



The capsule was very thick and there was no pus collection. Histopathological examination of the mass revealed well-circumscribed mass composed mainly of multinucleated giant cells and epithelioid macrophages engulfing foreign body material (Fig 3).

Figure 3

Figure 3: High power view shows granuloma with multinucleated giant cells and cross section of gauze fibres. (H&E original magnification x200)



The surrounding stroma was infiltrated by mature lymphocytes. There were no malignant cells present. These features were consistent with a foreign body granuloma. Post-operative recovery was uneventful.

DISCUSSION

A retained foreign material from a misadventure during

surgery is rare but important complication. It may produce a variety of postoperative complications and can lead to diagnostic misinterpretation¹, as shown in this case. Leaving unintended foreign material in a patient at operation is a nightmare for surgeons, hospitals and patients.

The actual incidence of retained gauze swab is difficult to ascertain because of a low reporting rate. Most of the data available is on retained gauze in the abdomen and thorax. The estimated occurrence varies between 1 in 100 and 1 in 5000 laparotomies².

In general, two types of foreign body responses can occur. The first type leads to an aseptic foreign body granuloma with fibroblastic reaction and complete encapsulation³. In most instances, this form shows no clinically significant symptoms⁴. The second type is exudative in nature and often leads to abscess formation³. This inflammatory reaction causes earlier and more severe symptoms than the first type⁴.

Routine practice of counting sponges before surgery and before closure is already established in operation theatre environment. The purposes for counting should be clear to all health care providers in a surgical suite and they should be committed to the same outcome (i.e, no retained objects)⁵. Counts should be performed with more consistency, accuracy, or efficiency⁵. Any factors which can lead to distraction of the personnel in charge during counting should be avoided. This practice should be highly maintain in any surgical situation because leaving a foreign object in a patient is considered medical negligence and is generally indefensible⁶. The damages are shared between hospital and surgeon. A “correct sponge count” does not exonerate the surgeon, who is expected not to leave anything behind⁶. The only way to be sure that no foreign body is left in the surgical field is for the surgeon to perform a thorough check before wound closure⁷.

CONCLUSION

Learning about safety in the operating room is a continual process. Illustration of this case has pointed out the possible disastrous effect on this patient secondary to disregard of a simple “correct sponge count”. He could have had undergone an unnecessary neck dissection with its co-morbidities. Therefore we should have our utmost respect towards the legacy of operating room etiquette that has been advocated from surgeons of yesteryears. And when we make a mistake, there are only three things we should ever do about it: admit it, learn from it and don't repeat it.

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