

## RETAINED ABDOMINAL SURGICAL GAUZE: REPORT OF A CASE AND REVIEW OF THE LITERATURE

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### INTRODUCTION

Retention of surgical sponges is rare, and is seldom reported due to medico legal implications. Awareness of this problem among surgeons and radiologists is essential to avoid unnecessary morbidity.

### CASE REPORT

A 30 years old lady presented in surgical OPD with a history of persistent vague pain in the lower abdomen. She had a history of caesarian section two months back in a local hospital of the city. She also had a history of low grade intermittent fever with occasional dysuria. There was no history of any bowel complaints.

On clinical examination the patient was in a good health and was afebrile on presentation.

On abdominal palpation there was tenderness in the lower abdomen and pelvic region. There was no definite palpable mass seen.

An urgent ultrasound evaluation was carried out. There was no free fluid or fluid collection. In the left iliac fossa region there was a large densely echogenic area with distal acoustic shadowing, suggesting a possibility of an organized hematoma with a differential of a retained abdominal sponge, post operatively.

On CT scan examination a characteristic spongiform shaped lesion was seen located in the left iliac fossa measuring 7.6 x 8.4 cms in size just beneath the anterior abdominal wall (Fig. 1).

After informed consent exploratory laparotomy was planned and carried out. During surgery, an abdominal sponge was found in the pelvis, lying adjacent to and adherent to sigmoid colon (Fig. 2). In addition there was a perforation of medial wall of

sigmoid colon.

Sigmoid colostomy was done successfully. Patient had a smooth recovery and was discharged on 7th post operative day. Colostomy was closed after 02 months.

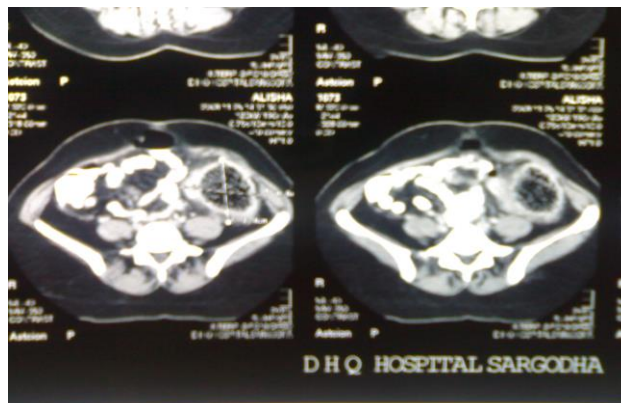


Fig-1: CT scan abdomen showing spongiform retained gauze piece.



Fig-2: Retained gauze piece being extracted during laparotomy

### DISCUSSION

Gossypiboma (from Latin gossypium cotton and Kiswahili boma place of concealment) or retained surgical sponge is a ubiquitous medical error that is avoidable. It can cause serious morbidity and possibly even mortality. Because it is not anticipated, it is frequently misdiagnosed and often unnecessary radical surgical procedures are performed. It should be considered in the differential diagnosis of any post operative case with unresolved or unusual problems [1].

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The risk of retention of a foreign body after surgery significantly increases in emergencies, with unplanned changes in procedure and with higher Body Mass Index.

Clinical presentation may be acute or sub acute and may follow months or even years after surgery. Intraperitoneal gauze pieces are prone to create adhesions and to encapsulate or to provoke an exudative response with or without accompanying bacterial infection. They can present as pseudotumors [2], as occlusion or septic syndromes.

Strict adherence to swab counts and the avoidance of change of staff during procedures is important in decreasing the incidence. Although human errors cannot be completely abolished, it is suggested that with the increasing use of minimally invasive procedures, the incidence of gossypiboma will fall dramatically [3].

Radiological evaluation plays a vital role in detection and for operative planning. Detection by plain radiography is difficult. Ultrasound demonstrates a hyper reflective mass with hypochoic rim and a strong posterior shadow.

CT is very useful for recognition of retained sponges. The appearance on CT is widely variable. Air trapping into a surgical sponge, results in a spongiform pattern, which is characteristic but unfortunately uncommon. A low density, high density or complex mass is

found in the majority of cases, but these patterns are not specific. Sometimes, a thin high density capsule may be seen. Rim or internal calcification is a rare finding. Differentiation from abscess and hematoma is sometimes difficult.

On MRI gossypiboma manifests as a well defined mass that shows a peripheral wall of low signal intensity at T1 and T2-weighted imaging. Contrast enhancement is seen at T1-weighted contrast enhanced scans. The whorled stripping within the central portion is characteristically shown as low signal at T2-weighted imaging and the serrated contour in the inner border of the peripheral wall are shown at contrast enhanced T1-weighted imaging [4].

In the conclusion it can be safely said that prevention of gossypiboma by adhering to Standard safety precautions in the Operation Theatre in particular is far better than cure [5].

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