

## Case Report

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## Twenty Years with a Retained Foreign Body after Hysterectomy: A Case Report

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### Abstract

**Introduction:** Unintentionally retained foreign bodies (RFBs) can be accompanied with acute reactions such as inflammatory responses, infections and abscesses within a few days or weeks after surgery with adverse consequences for patients and surgeons.

**Case Report:** An 84-year-old woman was admitted to hospital with weakness, lethargy and infectious secretions of the umbilicus. The patient had undergone hysterectomy 21 years before. Clinical examinations and accurate umbilicus explorations found a 0.5-mm fibrin and smelly umbilical secretions. Dragging found the fibrin to be a surgical gauze thread. The patient was therefore identified as a candidate for laparotomy, which revealed a long gauze attached to a band and a metal ring in the umbilicus and hypogastric regions as well as a large abscess containing 200 ml of infectious secretions, severe adhesions of the intestines to each other and to the abdominal wall, a 10×10 cm cavity and an approximately 1-cm fistula or laceration in the ileum due to the foreign body (long gauze). The patient was discharged from the hospital in good health conditions after the final surgery.

**Conclusion:** Given the possibility of leaving foreign bodies in the surgery site, surgical teams are required to precisely control surgical instruments after surgery.

**Key words:** Foreign Bodies; Hysterectomy; Surgical Instruments; Surgical Sponges

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### INTRODUCTION

RFBs after surgery are a rare medical error that may cause adverse outcomes for the patients and serious professional and legal consequences for surgeons and hospital authorities (1, 2). RFB refers to any surgical gauzes, instruments or devices that are unintentionally left in the patient's body after suturing the wound (3). The outcomes of RFBs in the patients' body may appear immediately after, months or even years after the surgery (4). The present report involves a rare case with an RFB for more than 20 years.

### CASE PRESENTATION

An 84-year-old female patient was admitted to the hospital with weakness, lethargy and infectious secretions of the umbilicus. She was treated for elevated urea and creatinine levels and infectious secretions from the umbilicus emerging a week before. A long piece of gauze had been left in the patient's abdomen 21 years before after she had undergone hysterectomy, and no interventions had been performed to remove it. Moreover, her family did not have any detailed information about this problem.

Clinical examinations and accurate umbilicus explorations showed a 0.5-mm fibrin and smelly umbilical secretions. The fibrin was found to be a gauze thread attached to a long piece of gauze that could not be easily removed from the umbilicus despite the effort made to remove it from the umbilicus (Figure 1).

The results of laboratory tests upon the patient admission were as follows: White blood cells



**Figure 1:** Foreign body in the patient's umbilicus



**Figure 2:** Removed foreign body

(WBC)=11210 /mm<sup>3</sup>, hemoglobin=12.5 gr/dl, potassium (K)=3.5 meq/l, urea=67 mg/dl and creatinine=1.5 mg/dl.

The patient was therefore identified as a candidate for laparotomy. Direct abdominal explorations showed a long piece of gauze attached to a band and a metal ring with a 3-cm diameter and a large abscess containing 200 ml of infectious secretions (Figure 2).

Severe adhesions of the intestines to each other and to the long gauze were observed. The abdomen and pelvis were frozen and the long gauze was skillfully removed and the abscess was drained. The 10×10 cm cavity created in the site of the gauze was irrigated. An approximately 1-cm fistula or laceration was also observed in the ileum due to the foreign body. The site of the fistula was therefore repaired. The patient was transferred to the Intensive Care Unit (ICU) after the surgery.

Five days later, the fistula repair failed. The patient was treated with Total Parenteral Nutrition (TPN) for two months and her clinical and para-clinical symptoms were carefully monitored. The fistula was not, however, repaired and considerable gastrointestinal secretions were continuously drained from the fistula.

The patient was again identified as a candidate for surgery after suppressing the inflammation and infection of the fistula. Adhesions were released, and the resection and anastomosis of the intestines were performed.

One week later, the secondary restoration of the abdominal wall was performed and the abdomen was sutured. The patient was discharged from the hospital in good health conditions ten days after the final surgery.

## DISCUSSIONS

RFBs in patient body after surgery is a risk factor that potentially threatens patient safety and may cause dangerous consequences for patients and even surgeons (5). Research suggests that the most common RFBs include surgical gauze or long gauze, and the main risk factors for RFBs include emergency surgeries, unexpected surgical changes, body mass index and miscounting of surgical gauzes and instruments after surgical operations (6). RFBs have been reported as 52% in general surgeries and 22% in gynecological surgeries. The most commonly observed sites of RFBs respectively include the abdomen (56%), the pelvis (18%) and the chest (11%) (7).

Surgical gauzes are difficult to be distinguished from the surrounding tissues, as they absorb lots of blood during surgery. Surgeons responsible for surgery and its complications are therefore recommended to pay more attention and emphasize the accurate counting of all surgical instruments and small and large gauzes, and perform a complete and precise search to effectively minimize the risk of RFBs in body.

Although research suggests that surgical gauzes and instruments were accurately counted at the end of surgeries in 80% of RFB cases (4), definite criteria are still required to completely eliminate the risk. Furthermore, preventive strategies have been mainly proposed to raise awareness of the risk. It is worth noting that RFBs can be managed using accurate approaches based on precise assessments and complete knowledge about their nature, size and shape (8).

Accurate assessments are essential for the diagnosis and treatment of RFBs. Moreover, patient clinical conditions and the type of RFB play

a key role in selecting treatment strategies. Emergency surgeries are required in case RFBs cause abscess, perforation, obstruction, bleeding and acute abdomen (9).

#### CONCLUSIONS

Patient history and initial physical examinations are the most important factors that help physicians with diagnosis when dealing with patients. RFBs can be a potential reason for chronic infections and repeated abdominal inflammations in patients with a history of abdominal surgery.

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#### AUTHORS' CONTRIBUTION

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#### CONFLICTS OF INTEREST

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