

Case Report

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A retained surgical drain in the abdomen for five years

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ABSTRACT

Retained surgical drain in the peritoneal cavity is very rare but potentially dangerous error. Most cases are unreported because of the fear of medico-legal problems. Management of such iatrogenic complications requires repeated laparotomy or wound exploration. We reported a case of a large corrugated rubber drain migrated and retained accidentally in the abdominal cavity in a patient who underwent exploratory laparotomy for peritonitis secondary to perforated appendix about five years ago.

Keywords: Foreign body, Corrugated rubber drain, Migration, Retained in abdominal cavity, Chronic pain

INTRODUCTION

Retained surgical drain may cause harm to the patient and can result in serious professional and medico-legal consequences. Management of such iatrogenic complications requires repeated laparotomy or wound exploration.¹ We reported a case of a large corrugated rubber drain migrated and retained accidentally in the abdominal cavity in a patient who underwent exploratory laparotomy for peritonitis secondary to perforated appendix about five years ago.

CASE REPORT

A 40 year old lady presented to us a tertiary care centre with chronic intermittent mild to severe pain in abdomen since five years. She has no other complains. She underwent laparotomy for perforated appendix five years back at another private hospital in rural area. Since then she had intermittent mild pain in abdomen but ignored. With time frequency, intensity and duration of pain increased. She consulted many doctors for the same, several ultrasounds were done which were normal. Physical examination and laboratory findings revels normal findings. CT abdomen done which revels long

hyper dense foreign body lesion in pelvis suggestive of drain (Figure 1). She underwent laparotomy by lower midline incision and the corrugated rubber drain was found in the pelvis.



Figure 1: CT scan showing drain in pelvis.

(Figure 2) Drain was adherent to small bowel loops. Drain removed after adhesiolysis. Postoperative recovery was uneventful and an immediate relief of abdominal pain was noted.



Figure 2: Intraoperative photo showing corrugated rubber drain in pelvis.

DISCUSSION

A retained surgical foreign body (RSFB) in the abdominal cavity following surgery is a continuing problem. Despite being preventable, the estimated incidence of retained surgical foreign bodies is approximately 0.3-1.0 per 1000 abdominal operations.¹ This figure may be underestimated because every incident is not reported for fear of legal problems. The clinical presentation of RSFB may be acute or delayed while many RSFB are identified and retrieved immediately or shortly after surgical wound closure some may go undetected for years or even decades.^{2,3} It has been estimated that RSFB occurs most often following abdominal procedures (52%) followed by gynaecological (22%), urologic and vascular procedures (10%).² Anatomical locations that most often house retained surgical foreign bodies are the abdomen, the retro peritoneum, and the pelvis. In fact the abdomen and pelvis account for well half of all RSFB.⁴

Manifestations ranged from mild abdominal pain, palpable mass, sepsis, abscess, fistula formation and intestinal obstruction secondary to adhesions or occlusion of the intestinal lumen because of migration of the foreign body. Incidental RSFB finding on radiological investigations have also been described. The use of postoperative surgical drain is common procedure. Usually indication for drainage and drain type choice decided by surgeon instead of being driven by data. Drain placement is indeed not lack of complications such as infection, pain, haemorrhage, perforation and herniation, fracture, fragmentation or migration.⁵ It is not possible to know the real incidence of these complications because of underreporting. The dislocation and migration of drain occurs due to surgeon's mistake, most are retained unknowingly, or if the drain is fractured and retracted intraperitoneally, because they were curled, sutured loosely with an unsecured knot, or overstretched if any excessive force was used during its removal. Leaving them for any period of time allows for tissue ingrowths

around the drain and side holes, causing severe resistance on removal, with eventual breakage and retention. Choosing the correct drain type and correct technique is the first step to prevent these complications. Literature revealed innovative approaches to resolve this iatrogenic complication of retained drain, such as percutaneous retrieval utilizing C-arm fluoroscopy guided tract exploration with surgical hemostat.⁶ Namyslowski et al. discussed utilizing balloon angioplasty through the drain site.⁷ Almost always, the patients ended up undergoing re-exploration using formal laparotomy. With the diversity and new instruments evolving in laparoscopy, laparoscopic removal of retained drains is feasible and has become the treatment of choice.⁸

CONCLUSION

Peritoneal drains may get migrated during mobilization, causing them to be retained intra peritoneally. Many RSFB are identified and retrieved immediately or shortly after surgical wound closure some may go undetected for years or even decades.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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