# Abdominal foreign body: late presentation as a rectus sheath abscess

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# **ABSTRACT**

Intra-abdominal ingested foreign bodies are usually an incidental finding, typically encountered in mentally challenged patients. We present the case of a 65-year-old mentally sound woman who presented with recurrent abdominal pain and a lump in the hypogastrium. Evaluation revealed a rectus sheath abscess extending to the peritoneum, with a foreign body *in situ*. On enquiry, the patient revealed that she had accidentally ingested a tailoring needle 17 years ago. This case illustrates an unusual presentation of an ingested foreign body as a rectus sheath abscess after a long duration.

Keywords: abdomen, abscess, foreign body, rectus

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# **INTRODUCTION**

The incidental detection of ingested foreign bodies is usually observed in patients who are mentally challenged. They can present years after ingestion or may be asymptomatic for long periods of time. Our patient was mentally sound and presented with foreign body granuloma and an abscess within the rectus sheath, which was a very unusual occurence. This case report serves to emphasise the importance of history-taking in the differential diagnosis of acute abdominal pain. To our knowledge, this is the first such case being reported in the literature.

# **CASE REPORT**

A 65-year-old Indian woman presented to the emergency department with recurrent abdominal pain and tender lump infraumbilically. She possessed no history of bowel or bladder disturbances, or any previous surgeries. The patient was a tailor by profession, and had a past history of diabetes mellitus, for which she was on regular oral hypoglycaemics. She was afebrile on physical examination, and a tender parietal wall lump was palpable infraumbilically Computed tomography (CT) imaging revealed a heterogeneously enhancing soft tissue density lesion, with a broad base to anterior



Fig. I CT image shows a rectus sheath abscess with a foreign body



Fig. 2 Intraoperative photograph shows a rectus sheath abscess.

abdominal wall noted within and adjacent to the rectus abdominis muscle on the left side at the level of the pelvic inlet. The lesion measured  $4.3~\rm cm \times 6.1~\rm cm$  and showed several non-enhancing areas and air pockets, which were suggestive of necrosis. A linear hyperdense area of density measuring 300–900 HU was found within the lesion, with a craniocaudal length of 3.5 cm and a width of 1.2 cm; these signs were suggestive of the presence of a foreign body. The lesion was displacing adjacent small bowel loops posteriorly with adjacent fat stranding (Fig. 1).

As the patient was symptomatic, we proceeded with exploratory laparotomy, which showed a parietal wall tumour measuring  $5~\rm cm \times 5~cm$  infraumbilically (Fig. 2). A foreign body (metallic needle) was seen within the tumour. The omentum was adherent to the tumour. The

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Correspondence to: Dr Medappil Noushif Tel: (91) 98 4622 0530 Fax: (91) 49 4240 0143 Email: noushif@gmail. com tumour was resected in the toto and the abdominal wall repaired. The postoperative period was uneventful. On enquiry, she revealed that she had accidentally ingested a tailoring needle 17 years ago, for which no medical attention was sought. Histopatholgic examination was suggestive of a chronic suppurative lesion.

# **DISCUSSION**

Intra-abdominal foreign bodies have a wide spectrum of presentations, as they can reach the abdominal cavity through the mouth, anus, urogenital canal, or percutaneously. A detailed history usually offers knowledge regarding the type of foreign body ingested. Such history may not be available in children and mentally challenged or uncooperative patients, and about 20% of patients may be asymptomatic. Most ingested foreign bodies (accidental or deliberate) transit through the gastrointestinal tract without difficulty. Sharp objects present the risk of perforating the gut wall, but this occurs in less than 1% of patients.

Localised swelling in the rectus sheath can be due to necrotising fasciitis, haematomas or tumours. A rectus sheath abscess commonly occurs as a result of secondary infection of a rectus sheath haematoma, usually after aspiration. The rare possibility of tuberculosis should also be considered. A rectus sheath abscess may also be associated with Crohn's disease. Recently, it was reported to be the result of a secondary infection of

laparoscopic port site haematomas.<sup>(6)</sup> Ultrasonography is useful in providing an initial evaluation; it has a sensitivity of 80%–90% in depicting rectus sheath pathology.<sup>(7)</sup> CT imaging gives precise anatomic details and helps in determining the location, size and extension of the abscess.<sup>(7)</sup> Magnetic resonance imaging has a role to play when CT findings are not specific.<sup>(7)</sup>

Our case illustrates the unusual presentation of an ingested foreign body as a rectus sheath abscess. To our knowledge, this is the first such case reported in the literature within the last decade. We emphasise the importance of proper history-taking when evaluating abdominal pain, especially in mentally challenged patients and children.

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