Laparotomy for perforated small bowel from ingested paperclips

Ishaan Maitra,1 Emma Watts,2 Ashok Menon,1 Nigel Scott3

1Department of Upper GI Surgery, North West Deanery, Royal Preston Hospital, Preston, UK
2Royal Preston Hospital, Preston, UK
3Department of Colorectal Surgery, Royal Preston Hospital, Preston, UK

Correspondence to Ishaan Maitra, ishaan.maitra@googlemail.com

DESCRIPTION

Eighty to 90% of ingested foreign bodies which reach the stomach will pass uneventfully through the gastrointestinal tract.1-3 One per cent may require a surgical procedure as 10% can be removed endoscopically.1 The risk of complications including perforation, obstruction and haemorrhage is increased with long sharp metal objects, and may be higher in patients with adhesions due to prior abdominal surgery.1

Objects less than 6 cm in diameter can pass through the pylorus of the stomach and can theoretically cause small bowel obstruction and/or perforation.2 This report describes a 22-year-old male prisoner who previously ingested steel paperclips deliberately straightened out before swallowing which subsequently caused small bowel perforation.

Postingestion, he reported of diffuse central abdominal pain and a conservative approach was taken initially using intravenous antibiotics and fluids. Three days after admission his pain worsened and a CT scan with contrast was performed. This showed paperclip penetration through small bowel loops, with a 2.5 cm collection in the small bowel mesentry deep to these clips.

A laparotomy was performed and multiple straightened paperclips were found extruding through the jejunal wall resulting in two entero-enteral fistulae and free perforation into an abscess cavity (see figures 1 and 2). The collections were drained and all clips were removed using intraoperative X-ray imaging. The perforated segment of bowel containing the main mass of straightened paperclips was removed with small bowel reanastamosis (minimal peritoneal contamination). He was well enough for discharge 5 days later without any postoperative complications.

Learning points

▸ Jejunal perforations are relatively rare.
▸ No generalised consensus of how to treat foreign body ingestion greater than 6 cm—paperclips 6.7 cm in length.
▸ Surgery may be indicated where sepsis develops in the presence of persistent foreign bodies in the small bowel.

Acknowledgements Mr Nigel Scott, Mr Ashok Menon and Dr Emma Watts Royal Preston University Hospital, Radiology Department, Royal Preston University Hospital, Medical Photography Department.

Contributors Mr Scott operated case. Operators: Mr Scott, AM, IM consent obtained by EW.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES