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CLINICAL IMAGE

Management of small bowel perforation following foreign object ingestion

Shinban Liu* and George Ferzli

Department of General Surgery, NYU Langone Medical Center, 150 55th Street, Brooklyn, NY 11220, USA

*Correspondence address. NYU Langone Medical Center, 150 55th Street, Brooklyn, NY 11220, USA. Tel: (718) 630-7351; Fax: (718) 630-8471; E-mail: shinban.liu@nyumc.org

CASE PRESENTATION

A 55-year-old female with no significant past medical history presented with 2 days of abdominal pain after chicken bone ingestion. She was hemodynamically stable, afebrile, and without significant leukocytosis (WBC 9.9 k/ul) or lactic acidosis (<0.66 mmol/l). Her abdomen was soft with point tenderness in the right lower quadrant without signs of peritonitis. A CT with oral and intravenous contrast demonstrated a 2–4 cm thin, linear, hyperdense structure 8 cm proximal to the ileocecal junction that was partially extending outside the bowel wall

(Fig. 1a). The patient was given empiric intravenous antibiotics and brought to the operating room. Adherent loops of bowel were identified and bluntly dissected laparoscopically. The perforated segment of small bowel was then identified with the protruding foreign object. The foreign object was then carefully extracted (Fig. 1b) and the defect was closed with a figure-ofeight silk suture. Her postoperative course was uneventful and she was discharged 2 days later.

After ingestion of a foreign object, perforation of the small bowel most likely occurs in areas of decreased motility such as



Figure 1: (A) Cross sectional CT demonstrating extraluminal foreign object in the distal ileum (arrow). (B) Laparoscopic extraction of foreign object.

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This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/ licenses/by-nc/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact journals.permissions@oup.com the duodenum and proximal to the ileocecal valve. While initial imaging of suspected perforation may include plain radiographs, detection of extraluminal air indicative of perforation only ranges from 50% to 70% and often fails to localize the injury [1]. Therefore, the most useful imaging modality is computed tomography which is highly sensitive and specific for extraluminal air, location of the foreign body, and level of perforation [2]. Once injury is identified, patients should proceed to operative management including endoscopy, laparoscopy or open repair depending on level of involvement and degree of contamination.

CONFLICT OF INTEREST STATEMENT

No conflicts of interest declared.

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ETHICAL APPROVAL

Not required.

CONSENT

Patient consent for study inclusion obtained.

GUARANTOR

SL is the guarantor of this article

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