

PICTURES IN DIGESTIVE PATHOLOGY

Sigmoid colon perforation due to a foreign body ingestion

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INTRODUCTION

Intestinal perforation due to a foreign body (FB) is a rare cause of acute abdomen, however, it represent a diagnostic possibility that the physician must not forget.

CASE REPORT

A 35-year-old man with a medical history of schizophrenia was presented at the hospital because of abdominal pain and fever. There were evidence of localized peritoneal irritation by exam. His laboratory tests on admission revealed an elevated white blood cell count of 24.700 mm³ and neutrophilia (88.1%). An abdominal CT scan showed four foreign bodies (Fig. 1), one of them producing a sigmoid colon perforation with pneumoperitoneum. The patient was taken urgently to the operating room for surgery. A FB was found penetrating sigmoid colon (Fig. 2) without intra-abdominal contamination. A primary suture was performed and the patient was discharged to home without any complications.

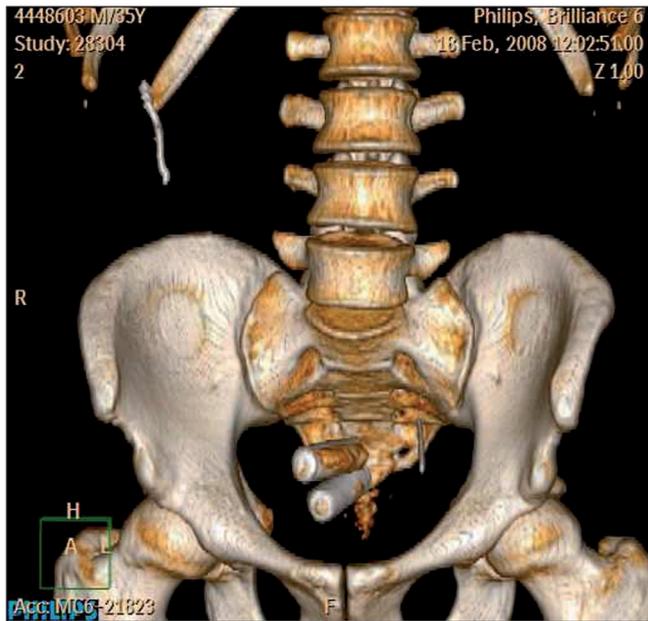


Fig. 1. Three-dimensional reconstruction of the abdominal scan showing the presence of four foreign bodies (two batteries and two needles). The lower needle was the responsible for the patient's clinical picture.

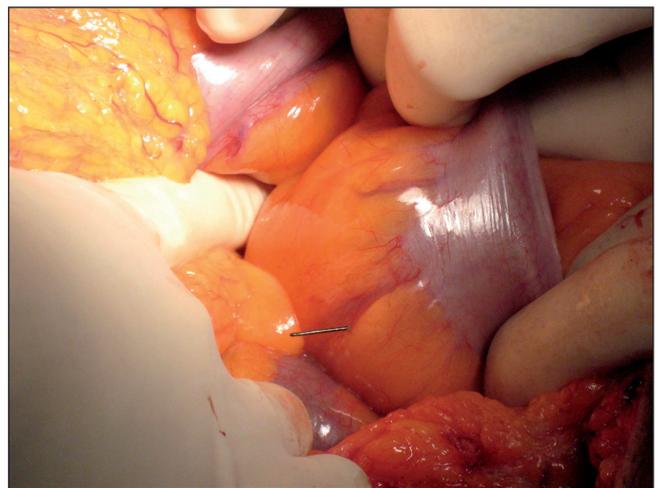


Fig. 2. Intraoperative macroscopic image where a perforation of sigmoid colon by a foreign body (needle) can be recognized.

DISCUSSION

Although the ingestion of FB, whether accidental or voluntary, is relatively common in the general population, most FB pass through the digestive tract without incident. However, in 1% of cases, an ingested FB causes complications such as acute abdomen due to intestinal perforation. The accidental ingestion of FB is more common among children, adolescents, the elderly and patients with dental problems. The most frequent sites of perforation by FB are the ileocecal and rectosigmoid regions, because the intestinal lumen narrows and the digestive tract angulated in these areas.

The type of treatment depends on the site of intestinal lesion and the local conditions. When perforation affects colon, the literature recommends wound eversion by colostomy. In present case, the lack of intra-abdominal contamination and the characteristics of the lesion (punctate perforation and lack of fecal material around the perforation) allowed to perform primary suture.

REFERENCES

1. Rodríguez-Hermosa JI, Codina-Cazador A, Sirvent JM, Martín A, Girones J, Garsot E. Surgically treated perforations of the gastrointestinal tract caused by ingested foreign bodies. *Colorectal Dis* 2008;10:701-7.
2. Goh BK, Chow PK, Quah HM, et al. Perforation of the gastrointestinal tract secondary to ingestion of foreign bodies. *World J Surg* 2006;30:372-7.
3. Velitchkov NG, Grigorov GI, Losanoff JE, Kjossev KT. Ingested foreign bodies of the gastrointestinal tract: retrospective analysis of 542 cases. *World J Surg* 1996;20:1001-5.