

Sigmoid perforation due to foreign body: A case report

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Case report

General Surgery



Background: We present a case and review of the bibliography of intestinal perforation in a pediatric patient with history of oppositional defiant disorder, with the peculiarity of presentation of encopresis and self-insertion of a foreign body causing the perforation picture.

It is important to detail the risk and the frequency in which this complication may occur in this type of patients, as well as the resolution.

Key words: Foreign body ingestion, sigmoid perforation.

Characteristic of oppositional defiant disorder is a repeatable pattern of oppositional and defiant behavior and is commonly associated with attention deficit hyperactivity disorder (ADHD), with which it is believed to share similarities in pathophysiology.¹ It is characterized by a recurring pattern of uncooperative, defiant, negative, and hostile behavior toward parents, peers, teachers, and any authority figures. They tend to argue, challenge and provoke situations where they easily lose control of their behavior, to the extent that it affects different aspects of their lives, such as their family relationships, their school performance and other interpersonal relationships.²

In addition to several studies in pediatric patients with ADHD, the association with head injuries, burns, fractures, as well as the introduction of foreign objects into natural orifices of the body have been mentioned in certain literatures, reporting that the probability of presenting an accident is up to 1.7 times higher in pediatric patients with said pathology, compared to the rest of the pediatric population.³

Case report

An 8-year-old male patient with oppositional defiant disorder who began his condition on June 10, 2021 due to a picture of progressive colic-type generalized abdominal pain up to 9/10 VAS scale of 1 day of evolution. Vital signs 80/56 mmHg, heart rate 110 bpm, oxygen saturation 95%, respiratory rate 20 rpm, and temperature 36°C.

Upon arrival at the emergency department, a hypoactive patient was found with pale mucous

membranes and integuments, mild dehydration, tachycardia, tachypneic, distended abdomen with decreased peristalsis, tympanic, painful on superficial palpation with frank data of peritoneal irritation, rest normal. An AP abdominal X-ray is taken, showing significant dilation of the transverse and descending colon, without the presence of air in the rectal ampulla, with abundant coprostasis at that level (Figure 1). Laboratories on admission: HGB 14.1, HCT: 42.8, PLT: 294, WBC: 24.16 NEU 93%, PT 18 sec, TPT 32 sec, INR 1.27.

Due to the highly suggestive clinical characteristics of acute surgical abdomen, it was decided to transfer the patient to the operating room for exploratory laparotomy, accessing the abdominal cavity, immediately finding foreign body perforation perforating hollow viscus (Figure 2). An exploration of the abdominal cavity and intestinal loops was performed, finding perforation at level of the sigmoid colon at 10 cm from the rectosigmoid junction, it is completely removed (Figure 3) leaving Babcock clamp as a reference, abundant intraluminal fecal matter is observed, exploration is completed without finding extra lesions and perforations, perforation is released, appreciating a diameter of approximately 1 cm, the edges of the perforation are revived and primary closure is performed with vicryl 2-0 with suture and second plan with 2-0 silk and Lembert stitches, abdominal cavity lavage is performed, Penrose-type drainage is placed on the left flank of 1/4, the muscular wall is closed facing the fasciae with vicryl 0, with surgete, the skin is closed with nylon suture and Sarnoff-type stitches, which concludes the surgery.

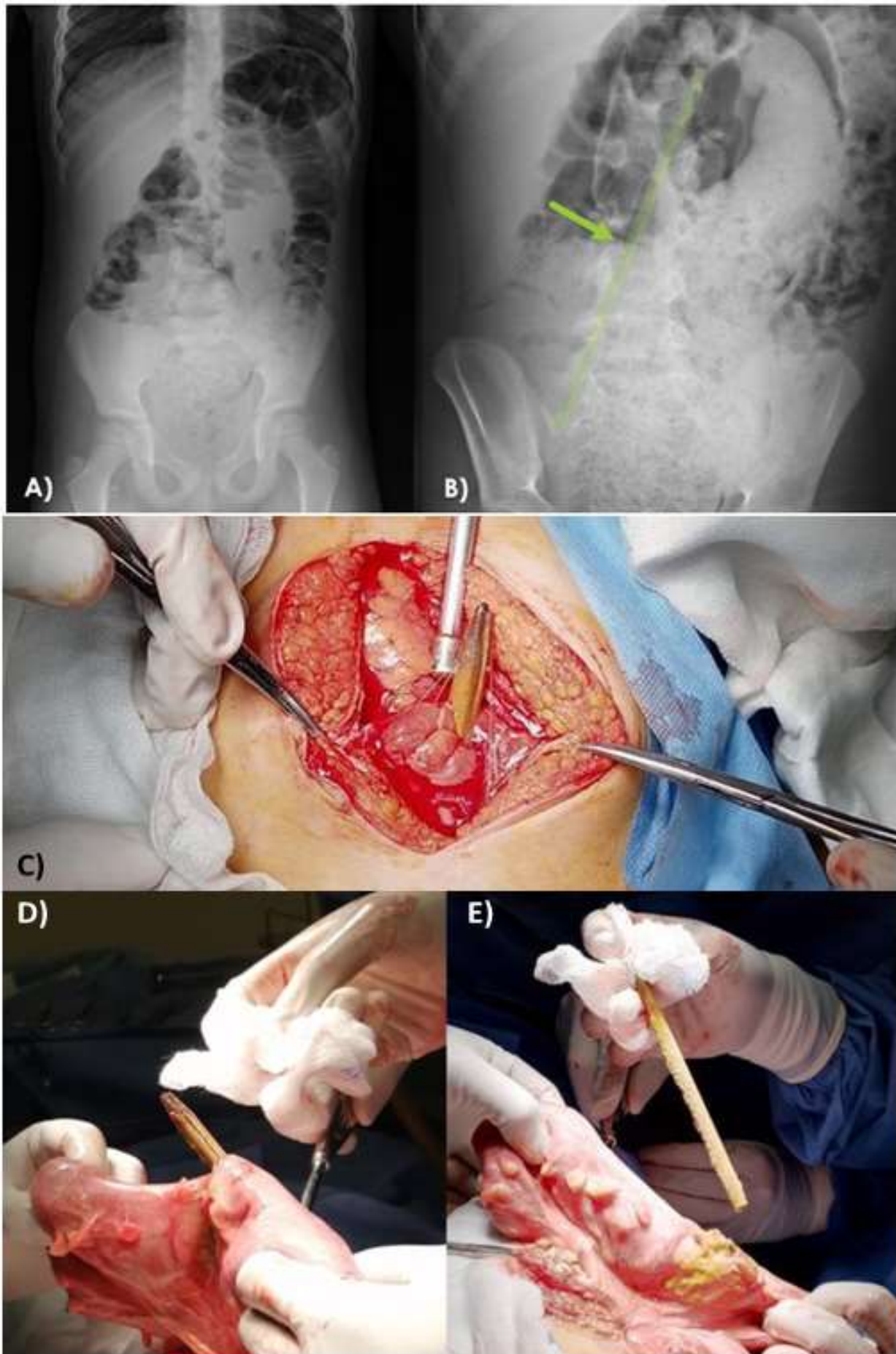


Figure 1. A. AP abdominal X-ray with visualization of coprostasis and dilation of intestinal loops. B. Radiographic image highlighting the foreign body. C. Foreign body (Pencil) found when exploring the abdominal cavity by laparotomy. D. Foreign body at the level of the sigmoid colon, 10 cm from the rectosigmoid junction. E. Removal of the foreign body in its entirety. sigmoid with 10 mm perforation.

He spent his first post-surgical hours with adequate evolution with decreased abdominal pain with the presence of a nasogastric tube to bypass with expenditure of gastric characteristics, chest with normal amplexion and amplexation movements, rhythmic heart sounds of high intensity and frequency, without pathological aggregates, soft abdomen, with the presence of a supra and infraumbilical surgical wound with well-addressed Penrose suture points to shunt with an output of 10 cc serohematic, peristalsis decreased in tone and frequency, painful on superficial palpation, he remains fasting for 4 days, NGT is withdrawn and a diet is started fluid to progression, with good tolerance channeling gases and evacuations present, with double antibiotic scheme based on ceftriaxone + metronidazole for 7 days.

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Conclusion

This condition in pediatric patients represents a risk for self-harm. We review the literature in which most of the reported cases correspond to the introduction of foreign bodies in the nasal and oral region, so we relate in this case that the reason for self-insertion was related to the presence of encopresis which was a factor for the self-insertion of a pointed object such as a pencil, unfortunately the patient's conditions did not leave much for the interrogation, nor with the parents at the time of being seen by the department of psychiatry. It is important to approach quickly and question all the antecedents in this type of patient since complications can lead to more serious complications.

Conflicts of interests

The authors declare no conflict of interest.

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