CASO CLÍNICO

A rare cause of intestinal obstruction: sock ingestion

Una causa rara de obstrucción intestinal: ingestión de calcetines

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Abstract

Although most foreign bodies leave the gastrointestinal tract spontaneously without causing serious injuries such as bleeding and obstruction, they can sometimes occlude the intestine and may present with symptoms of ileus. A 14-year-old boy with cerebral palsy was admitted to our center due to persistent bilious vomiting. A foreign body (sock) was seen in the jejunal loops at laparotomy. Enterotomy and enterostomy were performed.

Keywords: *Socks ingestion. Foreign body. Children.*

Resumen

Aunque la mayoría de los cuerpos extraños abandonan el tracto gastrointestinal de forma espontánea sin causar lesiones graves como sangrado y obstrucción, a veces pueden ocluir el intestino y pueden presentarse con síntomas de íleo. Un niño de 14 años con parálisis cerebral ingresó en nuestro centro por vómitos biliosos persistentes. Se observó un cuerpo extraño (calcetín) en las asas yeyunales en la laparotomía. Se realizó enterotomía y enterostomía.

Palabras clave**:** *Ingestión de calcetines. Cuerpo extraño. Niños.*

Introduction

Foreign body ingestion is one of the common problems among children[1]. Of the many kinds of objects found in such cases, which include coins, pins, button batteries, magnets, and many others, the most common objects found in most countries were coins[1,2]. Ingested foreign bodies can lodge anywhere in the gastrointestinal (GI) tract, including the proximal esophagus, distal esophagus, and stomach. The diversity of the foreign bodies and lodging positions can cause different severities of complications such as bledding and obstruction[2,3] A plain radiography can be the most useful investigation. The radiograph demonstrates the location, number, size, and shape of any foreign bodies[3].

Case report

A 14-year-old boy with cerebral palsy and medical history of foreign body ingestion was admitted to the emergency department due to intractable vomiting. The patient presented with a 2-day history of the inability to defecate, retch, nausea, bilious vomiting, restlessness, and abdominal pain. On abdominal examination, tenderness was observed. There was no gas and stool output after the rectal enema. At the admission, body

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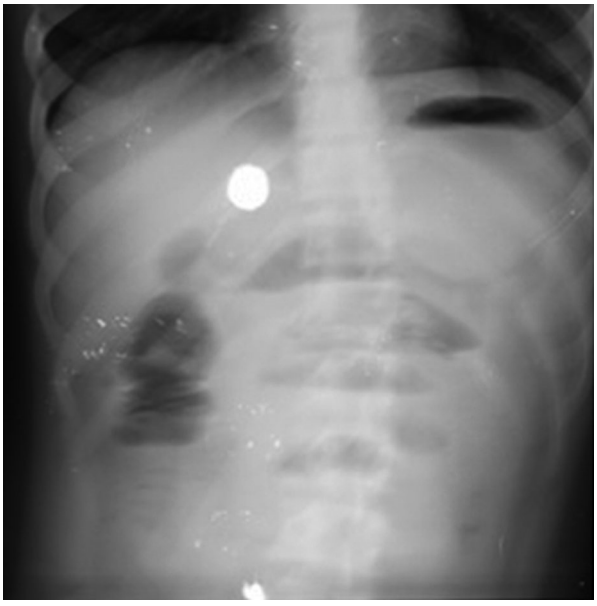

Figure 1. *X-ray shows several air-fluid levels.*

Figure 2. *Computed tomography; the foreign body observed in bowel loop.*

temperature: 37.5°C, blood pressure: 110/76 mmHg, heart rate: 96/min, C-reactive protein: 1.25 mg/dL, WBC: 22.74, and NEU: 20.9. The X-ray revealed an air-fluid level with partial obstruction (Fig. 1).

The CT reports noted intestinal obstruction and ileus secondary to foreign body ingestion (Fig. 2).

Then, the patient underwent a laparotomy. All bowel loops were checked. We found that proximal intestinal loops were dilated. The foreign body (sock) was palpable at 110 cm of the ligament of traits (Fig. 3). Enterotomy was performed at this point of the intestine on the antimesenteric face and the sock was removed. And then, the intestine was repaired with a double layer of continuous stitching. Endoscopy was performed on the patient, and after making sure that there was no other foreign body. The surgical intervention was completed without complications.

Oral feeding was started at the post-operative 48th h. The patient was discharged uneventfully at the 72nd h postoperatively.

Discussion

Foreign body ingestion is a pediatric emergency disease that is very common in children, especially in mentally retarded individuals, and does not require surgery in the vast majority, but the surgical situation varies according to the location of the foreign body[1]. Although the majority of foreign bodies leave the GI tract spontaneously, especially large foreign bodies with the potential to adhere to the intestines cannot leave, and surgical intervention is required for these[2,3]. Some of these foreign bodies can be life-threatening[2]. When we look at the overall event, approximately 10-20% of cases of foreign body ingestion require endoscopic removal, while < 1% needs surgery to take out the foreign body or to treat complications[4]. Abdominal radiography is the first preferred radiological study in foreign body ingestion[4,5]. For this patient too, at admission, abdominal radiography was performed firstly. CT can be performed only in patients with suspected complications and for differential diagnosis[4-6]. Therefore, we performed CT for differential diagnosis of other causes of ileus. Laparotomy was performed on the patient after abdominal CT was reported as having intestinal obstruction due to a foreign body. For the patient with a history of foreign body, endoscopy was also performed; in case, there was a foreign body in the stomach. The main complications of the FBI in the bowel involve mucosal bleeding, intestinal obstruction, and perforation[1,4,7]. In this patient, we thought intestinal obstruction was due to a foreign

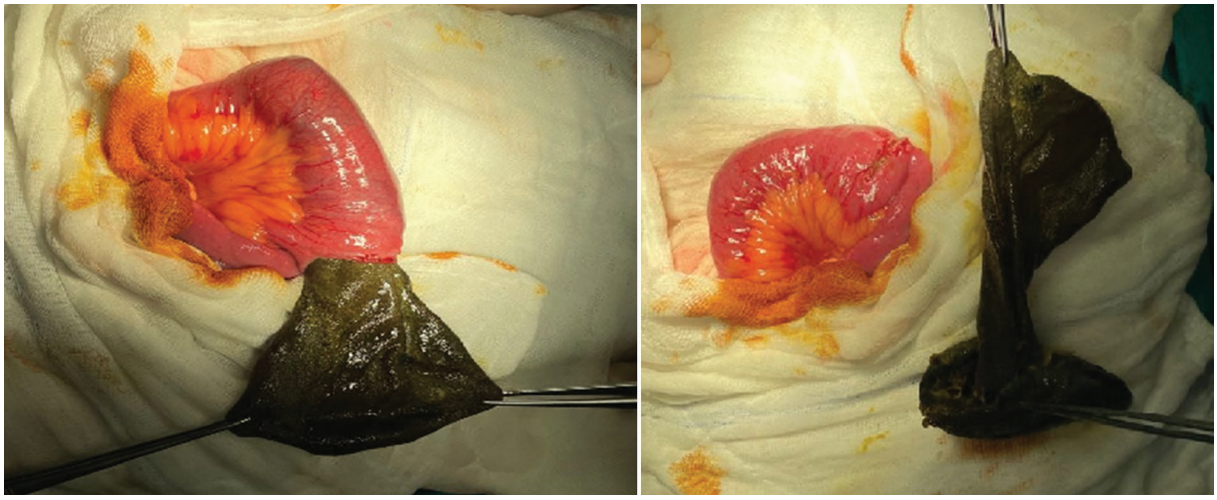

Figure 3. *The sock was clearly seen in the bowel loop.*

body, and therefore, we performed a laparotomy. Foreign bodies impacted in the intestine can be removed by performing enterotomy[8]. Thus, we performed an enterotomy and successfully removed the foreign body.

Conclusion

Especially when mentally retarded patients present with intestinal obstruction, it should be considered that they may have swallowed a foreign body, and CT may be performed to confirm the diagnosis in these patients. At the same time, considering that these patients may swallow more than one foreign body, endoscopy may be performed during the surgery.

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Conflicts of interest

The authors declare no conflicts of interest.

Ethical considerations

Protection of humans and animals. The authors declare that no experiments involving humans or animals were conducted for this research.

Confidentiality, informed consent, and ethical approval. The authors have followed their institution's confidentiality protocols, obtained informed consent from patients, and received approval from the Ethics Committee. The SAGER guidelines were followed according to the nature of the study.

Declaration on the use of artificial intelligence. The authors declare that no generative artificial intelligence was used in the writing of this manuscript.

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