Abdominal pain due to ileorectal fistula secondary to a foreign body: case report

Dolor Abdominal por fístula ileorrectal secundaria a cuerpo extraño: reporte de caso

Alejandro Junior Osorio*, Tomas Ayala**, Mercedes Aguilera***

Hospital Militar Central de las Fuerzas Armadas; Asunción, Paraguay

ABSTRACT
Ileorectal fistulas secondary to foreign bodies are rare and difficult to diagnose. We present the case of a 59-year-old female with chronic abdominal pain, vomiting, and weight loss. Imaging studies identified a fistula between the terminal ileum and rectal ampulla, secondary to a foreign body. Surgery was performed with terminal colostomy and temporary ileostomy. This case highlights the importance of timely diagnosis and appropriate surgical management.

Keywords: Ileorectal fistula, foreign body, abdominal pain, digestive surgery.

RESUMEN
Las fístulas ileorrectales secundarias a cuerpos extraños son infrecuentes y de difícil diagnóstico. Presentamos el caso de una paciente de 59 años con dolor abdominal crónico, vómitos y pérdida de peso. Estudios de imagen identificaron una fístula entre el íleon terminal y la ampolla rectal, secundaria a un cuerpo extraño. Se realizó cirugía con colostomía terminal e ileostomía temporal. Este caso destaca la importancia del diagnóstico oportuno y el manejo quirúrgico adecuado.

Palabras clave: Fístula ileorrectal, cuerpo extraño, dolor abdominal, cirugía digestiva.

INTRODUCTION

Ileorectal fistulas are an infrequent entity within digestive pathology and can have diverse etiologies, including intestinal inflammatory disease, neoplasia, surgical trauma and the presence of foreign bodies in the gastrointestinal tract [1]. Clinical manifestation tends to be unspecific, with symptoms like abdominal pain, weight loss, vomiting and alterations on the intestinal traffic standing out [2].

Foreign bodies in the digestive tube can generate severe complications, such as puncturing, abscesses and fistula formations, depending on its location and evolution time [3]. Early identification through image studies and a timely surgical or endoscopic intervention are fundamental to reduce the associated morbidity [4].

In this case report, the case of a 59-year-old patient with chronic abdominal pain and significant weight loss is presented, in whom a fistula was identified between the terminal ileum and rectal ampulla secondary to a foreign body. Clinical and imagery studies, as well as adopted therapeutic handling are discussed.

CLINICAL CASE

59-year-old female patient, known arterial hypertension with regular treatment, who reports to consultation due to recurring episodes of abdominal pain located on the hypogastrium, of insidious origin, puncturing type, moderated intensity, with irradiation on the left dorsal-lumbar region. The pain is associated with food content-vomiting on several occasions and weight loss of approximately 25 kg (55.1 lbs) in the past four months.

Reports having presented similar episodes for approximately six months, without achieving a definitive diagnosis. Doesn't report changes in intestinal habit nor hematochezia. Upon inspection, the patient remains in a generally moderate state, with evident signs of malnutrition, reflected in the loss of muscle mass. Doesn't present abdominal distension, but it does present signs of malnutrition. Upon abdominal touch, pain in the hypogastric area is observed, which exacerbates upon deep pressure, without presence of muscle defense nor signs of peritoneal irritation. There are no palpable masses, but there is moderate resistance in the mentioned region. Laboratory exams yielded GB: 17,400: 94 HB: 12.4 HTO: 37 other results within normal parameters.

Pelvis and abdomen computerized tomography: The presence of a dense lineal image of tubular aspect stands out, measuring 2.6 x 0.4 cm (1 x 0.15 inches) in size topographically located on the H12 and H1 upper rectum which is related to the rectum wall appearing to extend to other tubular structure that might correspond to the small intestine loop. Image could relate to the foreign body in the upper rectum's topography projected towards the mesorectal fat, affecting the adjacent small intestine

* General Surgery Resident –Armed Forces' Central Military Hospital (Hospital Militar Central De Las FF. AA.)
** General Surgery Specialist- Armed Forces' Central Military Hospital (Hospital Militar Central De Las FF. AA.)
*** Attending Chief – General Surgery – Armed Forces' Central Military Hospital (Hospital Militar Central De Las FF. AA.)
Corresponding Author: Dr. Alejandro Junior Osorio – Armed Forces' Central Military Hospital - General Surgery Services
Email: juniorosorio0496@gmail.com - Cel: +595986179458
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loop. Colon by Opaque Enema (Double contrast): Multiple saccular images along the entire colonic frame. Fistulous trajectory which connects the terminal ileum with the rectal ampulla. **Surgical findings:** Engrossed and dilated small loops, colonic pandiverticulosis, cramping of descending, sigmoid colon and cecum. Firm adherences and stiffness of all the latter yield an ileorectal fistula, along with a foreign body of 4 x 0.5 cm (1.5 x 0.19 inches), with bone consistency, within it. A sigmoidectomy and terminal colostomy on the left flank were performed, as well as a terminal ileostomy upon the difficulty of performing a primary anastomosis due to inflammatory process.

DISCUSSION

Ileorectal fistulas are an infrequent entity within digestive pathology and can have diverse causes, including intestinal inflammatory disease, neoplasia, surgical trauma and the presence of foreign bodies within the gastrointestinal tract [(1)]. In the presented case, the identification of a foreign body of bone consistency within the fistulous tract between the terminal ileum and rectal ampulla suggests that it was the causing factor of the chronic inflammatory process, resulting in the formation of a fistula.

The patient's clinical symptoms were characterized by chronic abdominal pain, vomiting and significative weight loss of 25 kg (55.1 lbs) in four months, which suggests a prolonged evolution of the pathological process. These symptoms are unspecific and can be present in diverse pathologies, including neoplasia and intestinal inflammatory disease [(2)]. Within this context, image studies performed a key role in the diagnosis. The abdomen and pelvis' computerized tomography allowed visualization of a dense lineal image in the upper rectum projected towards the mesorectal fat and affecting the adjacent small intestine loop, finding confirmed afterwards by an opaque enema [(3)].

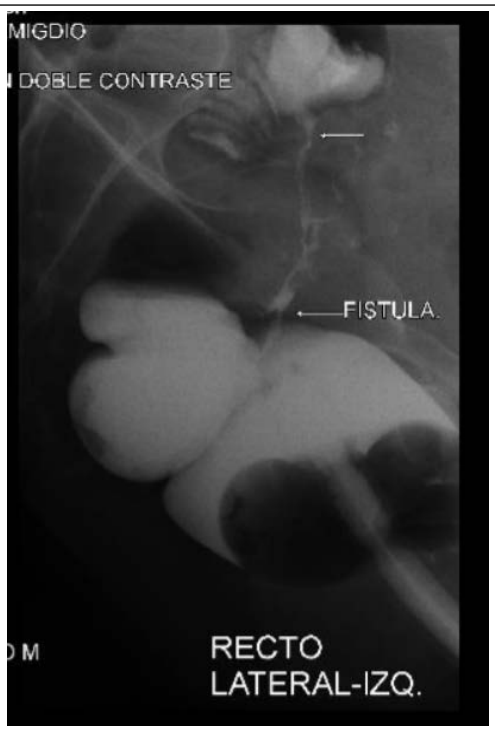

Figure 1. Colon By Opaque Enema, Seen Fistulous Trajectory Communicating The Terminal Ileum With The Rectal Ampulla

Foreign bodies in the digestive tract can cause severe complications, such as puncturing, abscesses, intestinal obstructions and fistula formation. Prolonged presence of a foreign body can induce a chronic inflammatory response which favors the manifestation of fiberoptic adherences and abnormal communication between adjacent structures [(4)]. In this patient's case, surgery confirmed the existence of an ileorectal fistula and presence of the foreign body, along with signs of colonic pandiverticulosis and extensive adherences. The severity of the inflammatory process prevented performing a primary anastomosis, hence a sigmoidectomy with terminal colostomy and temporary ileostomy was decided upon to enhance the patient's recovery [(5)].

Figure 2. Foreign Body, Corresponding To Bone Tissue.

The handling of ileorectal fistulas depends on their etiology and severity. In cases where a significative chronic inflammatory process exists, surgical treatment is the most adequate option. In less complex situations, endoscopic extraction of the foreign body could be a viable alternative [(6)]. In this case, the extensiveness of the intestinal damage and presence severe adherences justified the adopted surgical strategy.

CONCLUSION

This clinical case manifests the importance of considering the presence of foreign bodies in patients with chronic digestive symptoms without a clear diagnosis. Clinical suspicion, adequate use of image studies and timely therapeutic handling are fundamental to avoid severe complications and enhance the patient's forecast. In this context, multidisciplinary handling, including the collaboration among gastroenterologists, radiologists and surgeons, is the key to an adequate evaluation and treatment of these complex cases

CONFLICT OF INTERESTS AND FUNDING

Authors declare no conflict of interest during the creation of this case report. The study didn't receive funding from any public, commercial or non-profit source.

AUTHOR'S CONTRIBUTION

All authors actively participated in each phase of the study, from the research's design to the results' interpretation. Likewise, all contributed equitably in the writing, critical revision and approval of the final manuscript, assuming collective responsibility for its content.

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