Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

Title:
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DOI: 10.17235/reed.2025.11349/2025
Link: PubMed (Epub ahead of print)

Please cite this article as:
Moralejo Lozano Óscar, Sánchez Muñoz César, Abanades Tercero María, Carrillo Ramos María Jesús, Gigante González de la Aleja Gema, Ruano Díaz Lucía, Salmoral Luque Rosario, Gómez Rodríguez Rafael Ángel. Post-traumatic ileal stenosis: a rare entity not to be confused with Crohn's disease. Rev Esp Enferm Dig 2025. doi: 10.17235/reed.2025.11349/2025.

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Post-traumatic ileal stenosis: a rare entity not to be confused with Crohn's disease

Estenosis ileal post-traumatic. Una entidad rara que no se debe confundir con enfermedad de Crohn

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Keywords: Blunt abdominal trauma, ileal stenosis, post-traumatic ileal stenosis.

Dear Editor,

A 57-year-old woman with a history of polytrauma due to a car accident in March 2023 presented to the Emergency Room one month after this episode with subocclusive symptoms. A CT scan revealed a 10cm segment of the proximal ileum as the reason of the subocclusion. This segment showed wall thickening, vascular engorgement, and

inflammatory changes in the surrounding fat (Figure 1). The patient was admitted to the Surgical Department for conservative treatment. After several days without improvement, intravenous corticosteroids were initiated, leading to symptom relief. She was discharged on oral corticosteroids and referred to the Gastroenterology Clinic with suspected Crohn's disease.

However, she suffered two more subocclusive episodes, both responding to corticosteroids. Following a multidisciplinary discussion, infliximab therapy was initiated for presumed Crohn's disease. Although no further emergency visits occurred in the subsequent weeks, the patient continued to report chronic subocclusive symptoms and progressive weight loss. Given the diagnostic uncertainty and infliximab failure, surgical intervention was decided.

In November 2023, a 15cm segment of medium ileum was resected. Histopathological examination revealed acute and chronic inflammation, mucosal ulceration with granulation tissue, villous atrophy, haemorrhage in the lamina propria, and architectural distortion (Figure 1). The final diagnosis was post-traumatic ileal stenosis. Eighteen months after surgery, the patient remains symptom-free, with no signs of recurrence.

DISCUSSION

Small bowel obstruction following blunt abdominal trauma is a rare complication that may appear from one week to several months or even years after the trauma[1–3]. It typically involves a single area of stenosis, though multiple segments can be affected[1,2]. There are no specific findings, but a prior history of blunt abdominal trauma with no previous obstructive symptoms must raise suspicion on this entity. Ulcers, transmural inflammation, fibromusculosis, submucosal neovascularization, siderophages and foreign body reaction in the subserosa can be found in the histopathological examination[2]. The pathogenesis is hypothesized to involve an inflammatory response to localized perforation or mesenteric injury—such as hemorrhage, mesenteric tears, or vascular thrombosis[4] —that leads to ischemic damage and stenosis[2,3]. Compression of the bowel and mesentery between the seatbelt and spinal column has also been implicated[3].

The definitive treatment is surgical resection of the stenotic segment[1,2,4,5]. Intraoperative indocyanine green angiography may assist in evaluating mesenteric blood flow and determining the appropriate resection length[5]. This case highlights the importance of considering post-traumatic ileal stenosis in the differential diagnosis of subocclusive symptoms following abdominal trauma, especially when Crohn's disease is suspected.

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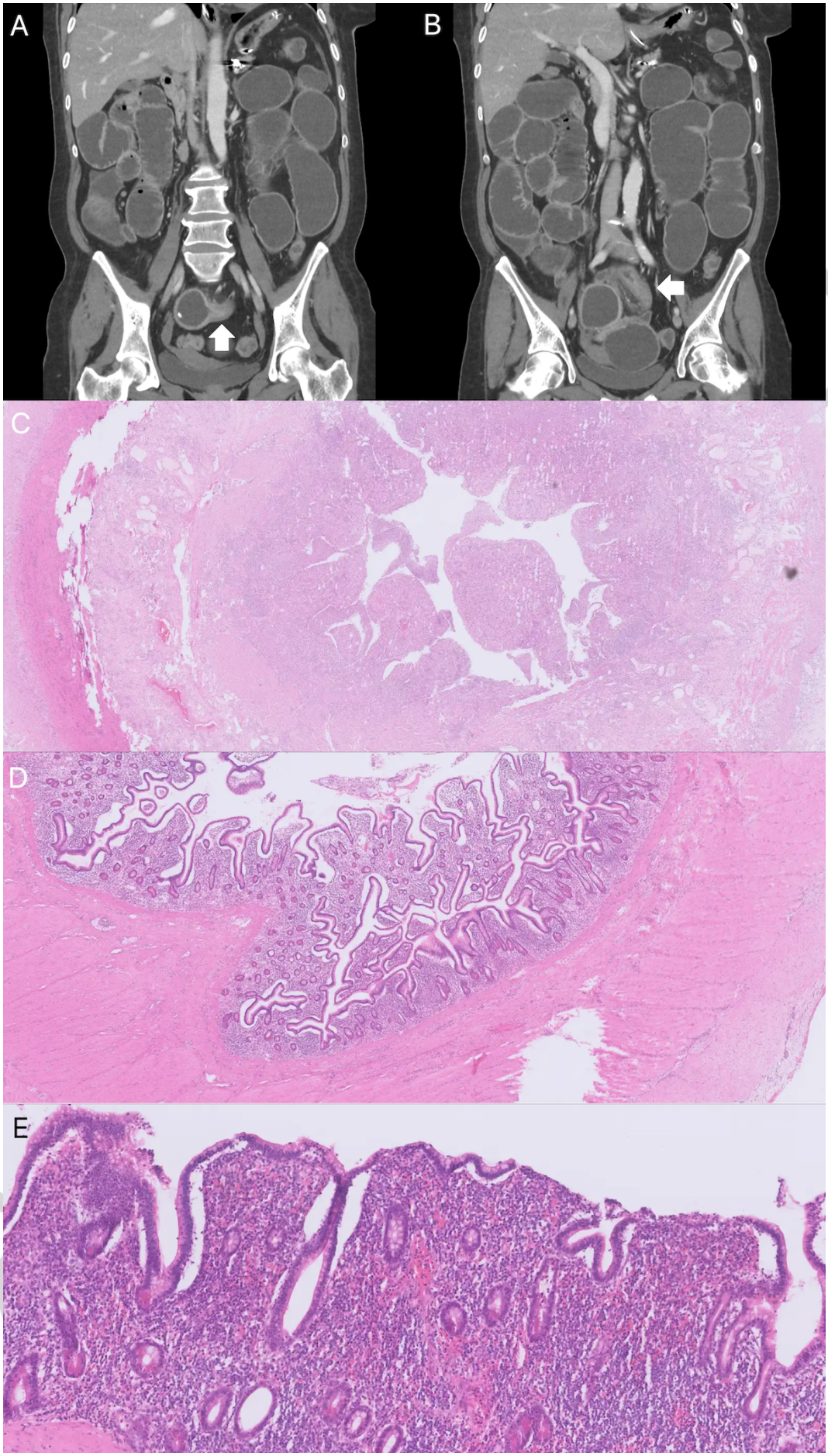

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FIGURE 1. A, B: CT scan with small bowel obstruction due to an ileal stenosis (white arrows). C, D, E: Histopathological images with mucosal ulceration (A) and inflammatory changes (D, E).