

Title:

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Submucosal infiltrate of Anisakis larvae. A rare cause of intestinal obstruction

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CASE REPORT

We present the case of a male patient aged 71 with a history of type 2 diabetes mellitus, who came to the Emergency Department due to abdominal pain and vomiting. Laboratory tests showed an increase in acute phase reactants. Abdominal computed tomography (CT) scan showed dilated jejunal loops up to 45 mm and free fluid, compatible with occlusion caused by a flange or internal hernia (Fig. 1).

Urgent intervention was decided, and a 15 cm jejunal segment with an inflammatory appearance was observed as the apparent cause of the obstruction, which was resected. The pathology report showed a prominent transmural inflammatory infiltrate and interstitial edema, with moderate villous atrophy, identifying parasitic structures compatible with Anisakis larvae (family Anisakidae). Given the mechanism of tissue invasion, the larvae were surrounded by a predominantly eosinophilic inflammatory infiltrate, organized as granulomas or abscesses (Fig. 2).



DISCUSSION

In intestinal anisakiasis, the most common symptom is abdominal pain with a latency of more than 12 hours. The clinical picture varies depending on whether inflammation or obstruction predominates. Other entities such as inflammatory or tumor processes should be considered in the differential diagnosis.

REFERENCES

- 1. Bartra Balcells È, Domènech Calvet J, Del Castillo Déjardin D. Intestinal obstruction caused by Anisakis. Rev Esp Enferm Dig 2021;113(7):547. DOI: 10.17235/reed.2020.7409/2020
- 2. Baron L, Branca G, Trombetta C, et al. Intestinal anisakidosis: histopathological findings and differential diagnosis. Pathol Res Pract 2014;210(11):746-50. DOI: 10.1016/j.prp.2014.06.022
- 3. Ildefonso C, Rodríguez I, Pérez-Holanda S, et al. Acute intestinal anisakiasis. Cir Esp 2005;78(1):59-60. DOI: 10.1016/S0009-739X(05)70889-7

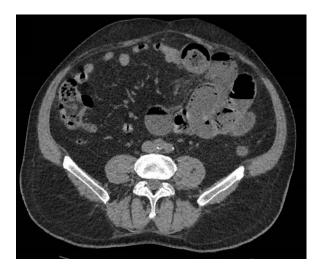


Fig. 1. Abdominal computed tomography (CT) showing dilated jejunal loops up to 45 mm and free fluid, compatible with occlusion caused by a flange or internal hernia.

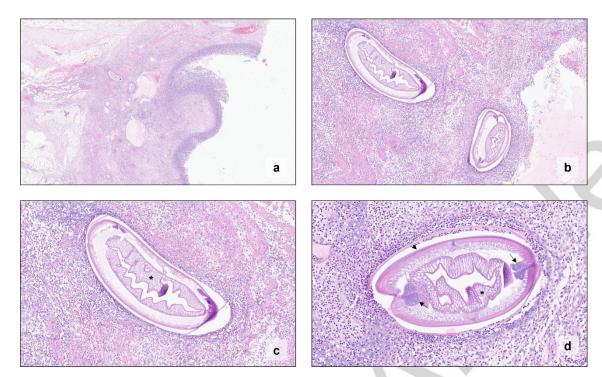


Fig. 2. A. Jejunal wall with prominent transmural inflammatory infiltrate with mild to moderate villous atrophy. B. *Anisakis* larvae in submucosa and muscularis propria accompanied by extensive inflammatory infiltrate and interstitial edema. *C. Anisakis* larva in the oblique section showing the intestine (*) with columnar cells. D. Cross section of *Anisakis* larva. The following parasitic structures are identified in cross section: intestinal segment (*), lateral cords (arrow) and cuticle (arrowhead).