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## Duodenal stenosis surgical treatment in Crohn's disease

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*Dear Editor,*

Crohn's disease (CD) is a chronic inflammatory disorder characterized by segmental and transmural disease of the digestive tract. The most common location is the ileocecal region (50 %); duodenal involvement is very rare (0.5-4 %).

### Case report

We present the case of a 34-year-old male with daily vomiting and 20 % weight loss in a year. A gastroduodenoscopy was performed, with dilatation of the 2<sup>nd</sup> and 3<sup>rd</sup> duodenal portion and inflammatory involvement of the 3<sup>rd</sup> and 4<sup>th</sup> portion, causing luminal stenosis. These findings were also seen by magnetic resonance imaging (Fig. 1). The biopsy proves the histological diagnosis of Crohn's disease.

At the beginning, the patient was treated with prednisone, adalimumab and ustekinumab. After nine months, surgery was decided because the disease was refractory to treatment with corticosteroid dependence. A partial resection of the 3<sup>rd</sup>

and 4<sup>th</sup> portion of the duodenum and the first loop of jejunum was performed, with duodenojejunal anastomosis (Fig. 1). The patient presented a good postoperative evolution and after one year he remained asymptomatic under treatment with ustekinumab.

## Discussion

Most of Crohn's disease duodenal lesions are asymptomatic, although in the event of stenosis, vomiting and weight loss may occur. The primary treatment must be medical. Proton pump inhibitors are the most recommended drugs in mild disease, being able to associate immunomodulators (1). Biological therapy should be added in severe disease, since immunomodulators are refractory in long term treatments. The main indication for surgery is the presence of obstructive symptoms despite medical therapy (2). Surgical resection is very complex because duodenal CD mainly affects the proximal portions of the duodenum. Due to the technical difficulty associated with duodenectomy, by-pass and stricturoplasty are the most widely used techniques. A by-pass can be performed gastrojejunal or duodenojejunal, depending on the location. Stricturoplasty is a more complex technique because it requires prior duodenal mobilization (3,4). However, duodenectomy may be a good option in experienced groups if the disease involvement is distal to the ampulla (5).

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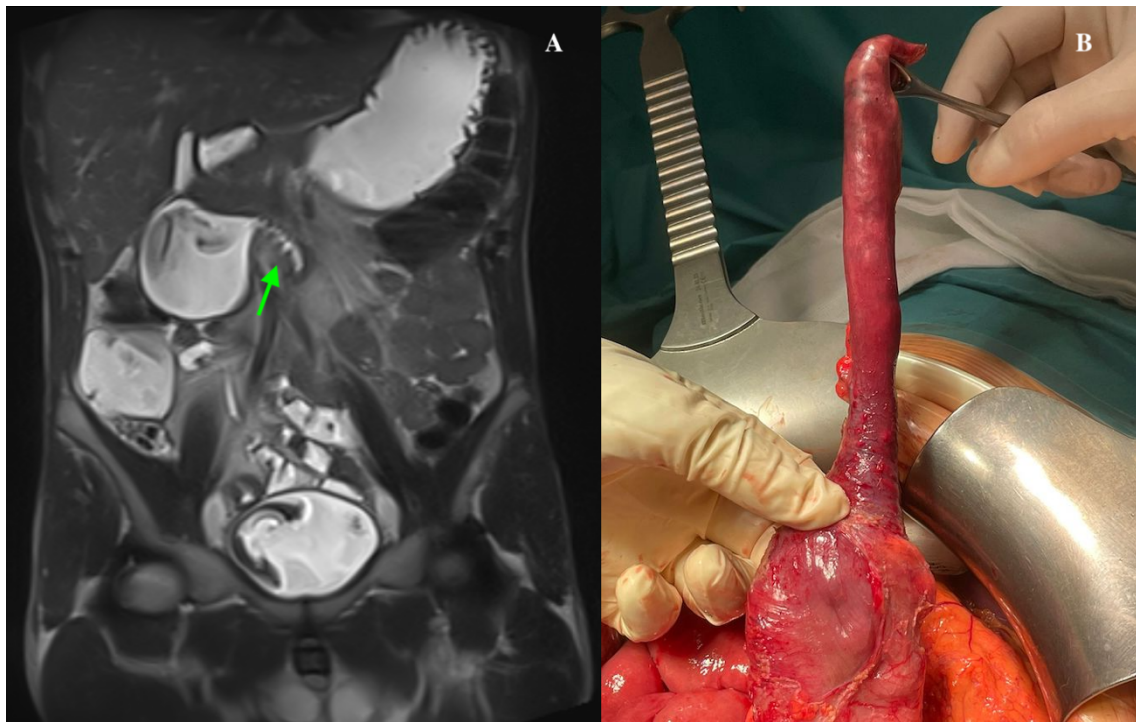


Fig. 1. Coronal section magnetic resonance imaging (MRI). Stricture, thickening and moderate stratified mural enhancement of 10 cm of the 3<sup>rd</sup> and 4<sup>th</sup> duodenal portion and proximal jejunum with retrograde gastric and first duodenal portions distension. B. Surgical piece. Dilation of the 3<sup>rd</sup> duodenal portion, stenosis of the 4<sup>th</sup> portion and first jejunal loop.