

## PICTURES IN DIGESTIVE PATHOLOGY

### Coloduodenal and enterocutaneous fistula in twins with Crohn's disease

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#### CASE REPORT

We present the case of a pair of 45-year-old monozygotic twins (A and B) diagnosed with Crohn's disease (CD) at age 20 (A) and 22 (B) with similar presenting symptoms: diarrhea, fever and weight loss. Both of them had duodenal and ileocolonic disease (A2, L3 + L4 according to Montreal classification); twin B also presented jejunal involvement and perianal disease (B1p). They received treatment with antibiotics, corticosteroids, 5-ASA, azathioprine and anti-TNF with a poor control of activity. They both developed a coloduodenal fistula (Fig. 1) that required surgery. Twin A developed the fistula 12 years after the first presentation; fistula closure with duodenorrhaphy and ileocolonic resection with gastrojejunostomy was performed. Twin B developed the fistula 22 years after the first presentation, and right colectomy, partial duodenectomy and duodenorrhaphy was carried out. Both developed an enterocutaneous fistula (Fig. 2) during the postoperative period. With intensive medical treatment, both twins remain asymptomatic.

#### DISCUSSION

Family history of CD is considered as a risk factor for developing the disease with a greater clinical concordance between monozygotic twins (20-50%). However, the pathogenesis is complex with the influence of environ-

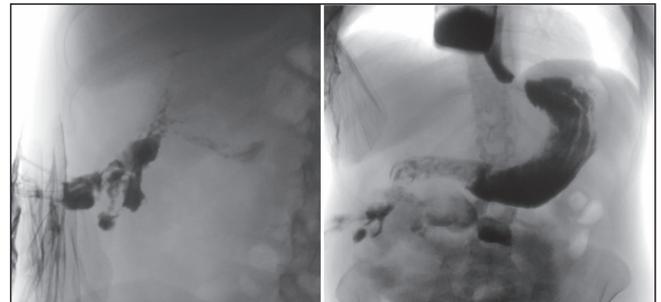


Fig. 2. Fistula transit: flow of contrast from the skin-hole to the duodenum through the fistula.

mental and genetic factors. The transmural nature of the disease can lead to fistula-formation. The most common enteroenteric fistulas are ileoileal, ileocecal or ileosigmoid; while cologastric or coloduodenal fistulas, such as those in our patients, rarely appear (< 1%). They cause a malabsorption syndrome due to the exclusion of large sections of the intestine. Imaging with oral contrast (barium transit, magnetic resonance [MR] or computed tomography [CT]) is used for diagnosis.

This is a case report in a pair of monozygotic twins who developed the same disease with a similar phenotype, evolution and severity, demonstrating the fact that family history plays an important role in the development of CD.

#### REFERENCES

1. Montoro MA, García Pagán JC. Gastroenterología y hepatología. Problemas comunes en la práctica clínica. 2ª ed. Madrid: Jarpay Editores; 2012. p. 443-58.
2. Catalina Parra C. Fistulizing Crohn's disease, current management and its applicability in the national reality. *Gastroenterol Latinoam* 2013;24(1):33-40.
3. Ulloa Márquez E, Manzano Alonso ML, Martínez Montiel P, et al. Enfermedad de Crohn fistulizante. *Rev Esp Enferm Dig* 2007;99:10.
4. Halfvarson J, Bodin L, Tysk C, et al. Inflammatory bowel disease in a Swedish twin cohort: A long-term follow-up of concordance and clinical characteristics. *Gastroenterol* 2003;124:1767-73. DOI: 10.1016/S0016-5085(03)00385-8
5. Thompson NP, Driscoll R, Pounder RE, et al. Genetics versus environment in inflammatory bowel disease: Results of a British twin study. *Br Med J* 1996; 312:95-6. DOI: 10.1136/bmj.312.7023.95

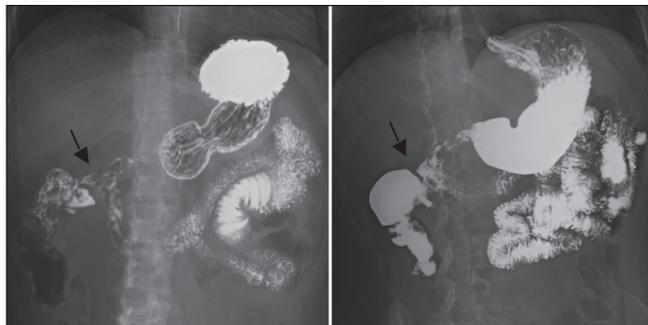


Fig. 1. Gastrointestinal transit: flow of contrast from the duodenum to the colon hepatic flexure through the fistula.