Colonic Chagas Disease in Portugal: A Key Differential Diagnosis in Non-Endemic Areas

Doença de Chagas com Envolvimento Cólico em Portugal: Diagnóstico Diferencial Chave em Região Não Endémica

Keywords: Chagas Disease/diagnosis; Colon; Portugal
Palavras-chave: Doença de Chagas/diagnóstico; Colon; Portugal

Dear Editor,

Chagas disease has an uncertain prevalence in Europe, often being underdiagnosed. It is caused by *Trypanosoma cruzi* protozoan, affects approximately 12 million people worldwide, and can lead to cardiac, esophageal, and colonic complications during the chronic phase. In Portugal, there are 1255 cases of people infected with *T. cruzi* according to a prevalence study conducted by the World Health Organization,[1] but only eight cases have been confirmed by serological tests, corresponding to an underdiagnosis rate of 99.4%.[2] Transmission occurs through vectors of the Triatominae, blood transfusions, organ transplants, ingestion of contaminated food and congenital transmission.[3]

Although acute infection is typically asymptomatic in most individuals, approximately 5% develop a mononucleosis-like syndrome. In the chronic phase, approximately 20% of patients develop cardiac involvement and 10% gastrointestinal involvement. In the intestinal form, the parasite leads to destruction of the myenteric plexus, causing progressive intestinal stasis, which may result in fecaloma and abdominal distension.[4] The most common complications include intestinal perforation and volvulus.[5]

At our hospital, Unidade Local Saúde de Santa Maria, in Lisbon, Portugal, we received a 64-year-old Brazilian male patient who was referred due to a two-year history of constipation, unresponsive to optimal medical therapy. He reported evacuation every seven to 10 days, increasing abdominal pain over the previous two weeks, without associated nausea or vomiting. He had been living in Portugal for 23 years and was diagnosed with Chagas disease 27 years before in Brazil, where he underwent a laparoscopic Heller cardiomyotomy for megaesophagus.

Therefore, an intestinal transit test revealed adequate barium progression through the small intestine, but after four hours, the contrast remained in the distal ileum and had not reached the proximal colon. The findings of esophageal dilation with decreased propulsive wave and decreased distensibility and rigidity of the proximal stomach were compatible with the patient's surgical history.

The patient was observed by a surgeon and was electively admitted to the Colorectal Unit and a subtotal proctocolectomy with a side-to-end mechanical ileorectal anastomosis and an ileostomy diversion was performed.

The histopathological examination confirmed Chagas disease involving the colon, with evidence of plexitis and reduced number of ganglion cells in a 132 cm colectomy specimen, which included 10 cm of ileum (Fig. 1).

The diagnosis of colon involvement in Chagas disease is primarily clinical and is important to consider as a potential differential diagnosis, particularly given the increasing immigration to Portugal from Latin America. However, the lack of screening programs and limited access to diagnostic and treatment services in Europe remain significant barriers to proper disease management.

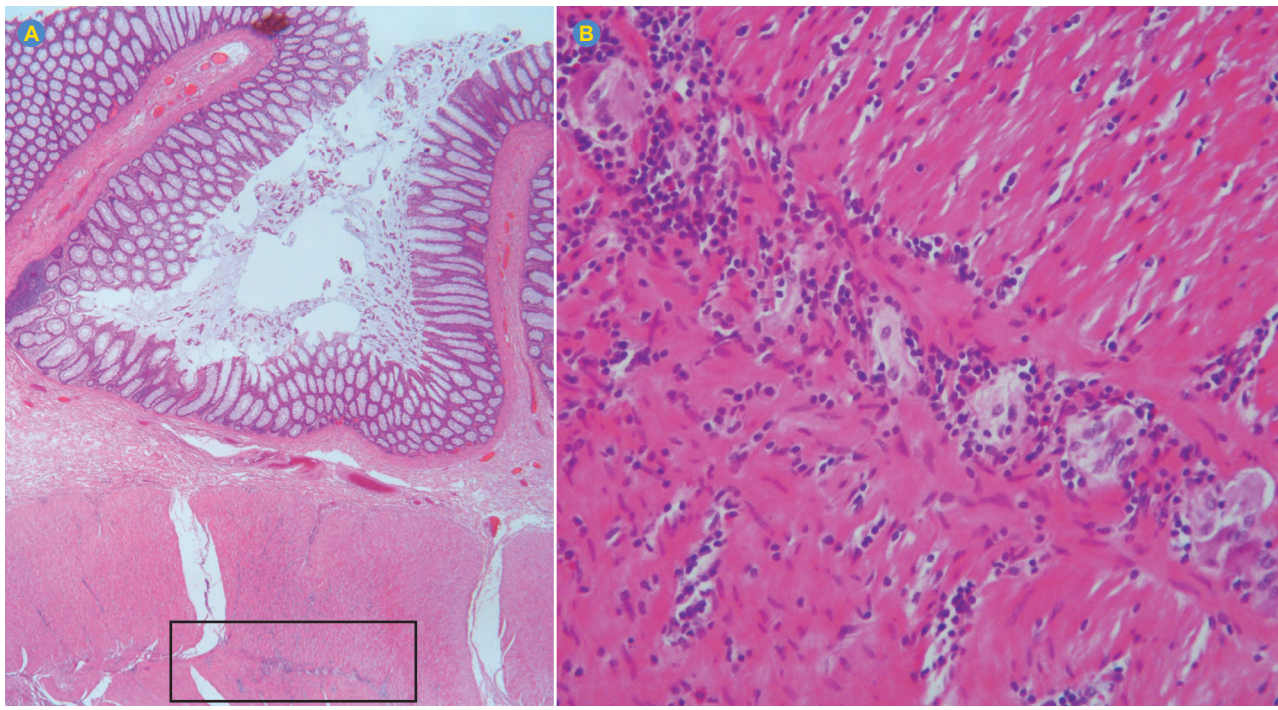

Figure 1 – Colon wall with foci of plexitis in myenteric plexus and diminished number of ganglion cells in myenteric plexus (left image, inlet, H&E 20x) (A). Chronic inflammatory infiltrate surrounding ganglion cells (H&E, 200x) (B).

AUTHOR CONTRIBUTIONS

EG: Literature review, data collection, writing of the manuscript.

EB: Study design, data acquisition, writing and critical review of the manuscript.

PR, CF: Critical review of the manuscript.

CQ: Data analysis and interpretation, critical review of the manuscript.

All authors approved the final version to be published.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in October 2024.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

PATIENT CONSENT

Obtained.

COMPETING INTERESTS

The authors have declared that no competing interests exist.

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