

regarding the frequency of dilations or the diameter that should be achieved. In most cases re-dilatation is performed if there is recurrence or partial relief.

The main advantage of endoscopic balloon dilation is to have the opportunity of direct visualization of the esophagus. Thus, have the chance to decide the caliber and the pressure of the balloon more sensitively and to identify the occurrence of a perforation or bleeding instantly.

Different adjuvant treatments have been proposed for cases of refractory or recurrent esophageal stricture, although there are no studies of their efficacy in the prevention of stricture relapse. The use of corticosteroids (either systemically or locally injected) as adjuvant treatment has been reported. However the data are conflicting and the use of intralesional triamcinolone acetonide injection does not seem to significantly improve the number of esophageal dilations or the dysphagia.⁵

In conclusion, balloon dilation of esophageal strictures resulting from RDEB is a safe procedure and seems to be an effective method of treatment. However, RDEB is a chronic condition and recurrence may be present in a great proportion of the cases after endoscopic dilation.⁴ In these cases, a reintervention may be repeated, as the balloon dilation is well tolerated by the patient and can be done frequently. Caution must be exercised during this procedure due to the likelihood of complications such as blister formation, bleeding, and perforation at the dilation site. Early recognition of dysphagia in a patient with RDEB can improve the quality of life of the patient.

We report a case of RDEB, a rare and challenging condition, that was successfully treated with one endoscopic balloon dilation. After endoscopic treatment, the patient presented a significant improvement of global health without any signs of recurrence at 12-months follow up.

Author contributions

Each author's contribution to the following criteria for authorship: 1 – conception and drafting of the article; 2 – critical revision of the article.

Intestinal tuberculosis simulating Crohn's disease: Differential diagnosis[☆]



Tuberculosis intestinal, simulador de la enfermedad de Crohn: diagnóstico diferencial

Introduction

Tuberculosis (TB) is an infectious disease, the prevalence and incidence of which are increasing in our area as a

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result of immigration and the use of immunosuppressants. Although TB usually affects the lungs, it is a systemic disease and can occur in other parts of the body; extrapulmonary TB is common in less developed countries.¹

Although gastrointestinal involvement is unusual, it is something we must be aware of, since TB has the ability to mimic other disorders common in our area, such as Crohn's disease (CD).² Numerous studies have attempted to create diagnostic algorithms to facilitate the differential diagnosis between these conditions.³⁻⁹ According to several recent publications,⁵⁻⁹ the final diagnosis of gastrointestinal TB should include epidemiological, clinical, radiological, endoscopic and histological findings.

We present a case of *Mycobacterium tuberculosis* with ileocolic and pulmonary involvement to illustrate the importance of the differential diagnosis of this disease, as the characteristics do not differ greatly from CD, but the prognosis depends to a large extent on the early introduction of a suitable treatment.

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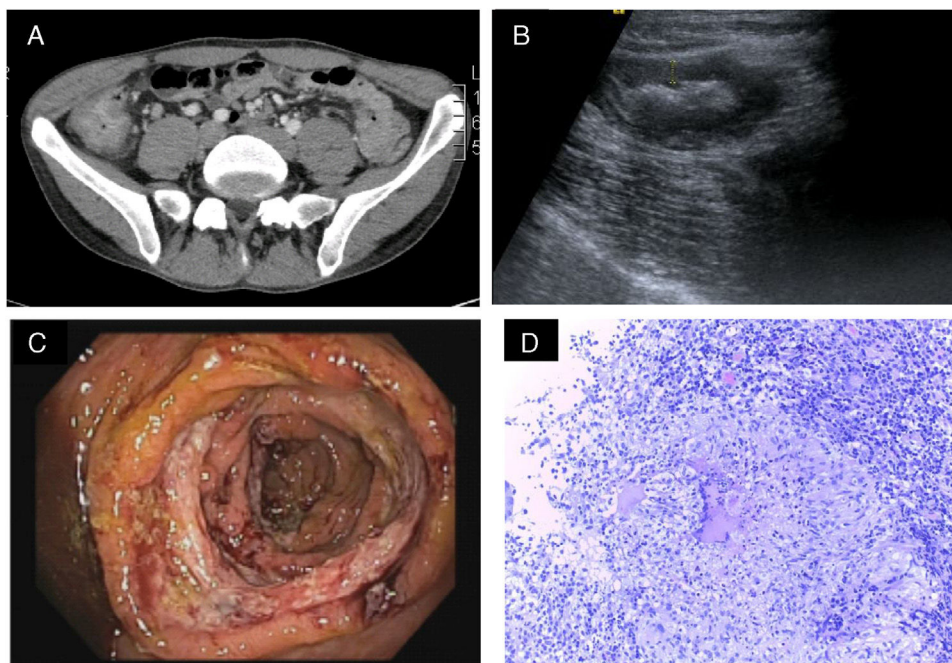


Figure 1 Ileocolitis with wall thickening seen by CT (A) and ultrasound (B). Endoscopic view of ascending colon with oedematous and ulcerated mucosa (C). Histology of a colon sample showing a caseating granuloma (D).

With this case report, we also highlight the main characteristics of intestinal TB, both clinical and radiological, endoscopic and histological, underlining the importance of the epidemiological context, which plays a crucial role in the diagnostic process.

Case report

In November 2015, a 31-year-old male from Romania and resident in Spain for five years was admitted to our hospital with a two-month history of abdominal pain located

in the right iliac fossa and umbilical region, radiating to his back. He also had associated weight loss of 10 kg, fever and night sweating, asthenia and nausea without vomiting. The patient smoked about 20 cigarettes a day and had no relevant medical/surgical history. He had apparently not had any contact with any patients with active TB.

Analytically, tests showed elevated C-reactive protein (58.9 mm/l) as an acute phase reactant, with a normal cell count. Abdominal ultrasound and computed tomography (CT) of abdomen and pelvis showed extensive ileocolitis from the terminal ileum to the ascending colon, with

Table 1 Differential diagnosis between Crohn's disease and intestinal tuberculosis.

Characteristics	Intestinal tuberculosis	Crohn's disease
Clinical	<ul style="list-style-type: none"> • More acute onset • Fever, weight loss, night sweats • No perianal disease 	<ul style="list-style-type: none"> • More insidious onset • Diarrhoea, abdominal pain • Perianal disease and typical extraintestinal manifestations
Radiological and endoscopic	<ul style="list-style-type: none"> • Ileum-caecum • Continuous lesions • Necrotising mesenteric lymph nodes and calcifications • Circular, transverse ulcers, scars. Fixed pseudopolyps 	<ul style="list-style-type: none"> • Ileum-caecum • Patchy lesions • Small, inflamed mesenteric lymph nodes • Mesenteric fat involvement.
Histological	<ul style="list-style-type: none"> • Multiple converging, caseating granulomas 	<ul style="list-style-type: none"> • Deep, longitudinal ulcers • Intestinal fistula • Smaller, single non-caseating, non-converging granulomas

wall thickening, peri-caecal fat involvement and multiple mesenteric lymphadenopathy, all of which as a first possibility could correspond with CD (Fig. 1). The chest X-ray showed a large cavitory nodule in the right upper lobe.

The colonoscopy found oedematous mucosa, friable to rubbing by the endoscope, and numerous circumferential ulcers in the terminal ileum, caecum and ascending colon. The ileocaecal valve was stenosed and deformed, but it was patent. Multiple biopsies were taken, and the histology showed chronic-looking granulomatous ileocolitis, abundant inflammatory infiltrate and numerous caseating granulomas (Fig. 1). With these findings, the QuantiFERON test, a bronchoalveolar lavage and Lowenstein culture were performed, all of which were positive, confirming the diagnosis of active pulmonary TB with intestinal involvement.

Anti-tuberculosis treatment was started according to the guidelines accepted at that time with good tolerance and clinical improvement. Within just a few days the patient's abdominal pain and fever and sweating had subsided.

Discussion

The case we have presented here underlines the importance of the clinical and epidemiological context of each patient, which must be taken into account in the diagnostic process. We also highlight the role of a good differential diagnosis, supported by radiological, endoscopic and histological findings, of two similar disorders like intestinal TB and CD, with completely different treatments.^{1,5,7,8}

Intestinal TB is an unusual manifestation of extrapulmonary TB.¹ The area most commonly affected is the ileum, followed by the colon. It is known as "the great imitator", as its main manifestations are very nonspecific, and diagnosis therefore has to be based on a set of clinical characteristics and complementary test results. It tends to have a more acute onset than CD. However, it can also manifest itself as a subacute or chronic disease. The symptoms most commonly reported are fever, night sweats and weight loss.⁵ Perianal disease is an uncommon finding in TB, supporting the diagnosis of CD.¹

Imaging tests, particularly CT enterography, can help guide us. Single or isolated ileal focal lesions and necrosis or calcifications in the mesenteric lymph nodes are typical findings of intestinal TB, while proximal and segmental involvement of the small intestine or the presence of fistulas should steer us towards CD.⁶

Endoscopically, in both diseases we may find circumferential ulcers or scars in the mucosa of the colon or terminal ileum. Taking biopsies of diseased tissue for histological and microbiological diagnosis help with the definitive diagnosis (PCR, Lowenstein medium culture, Ziehl-Neelsen staining). Colonoscopy is also useful in the follow-up and assessment of the treatment response in these patients.⁵

Although not very sensitive, the identification of caseating granulomas is a very specific finding of intestinal TB.¹ Given the similarity of the lesions with those in CD, it is important that the samples be examined by an expert pathologist with a high level of clinical suspicion. The main

characteristics of CD and intestinal TB are summarised in Table 1.

Medical treatment with anti-tuberculosis drugs is the first step when intestinal TB is suspected, and can be used empirically for a short time until the diagnosis is confirmed.⁸ Surgery is generally reserved for complications such as obstruction or stricturing, but there have been reports of endoscopic management in a few isolated cases, with good outcomes.¹⁰

Two recent studies developed diagnostic algorithms, combining epidemiological, clinical, radiological, endoscopic and histological characteristics. However, they require wider use to verify their effectiveness in routine clinical practice.^{5,6} TB is a real worldwide public health problem. A high index of suspicion and a methodical multidisciplinary diagnostic process are essential for early diagnosis and early treatment of these patients.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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Intestinal pseudopolyps in a patient with Crohn's disease and renal transplant – An unexpected diagnosis



Pseudopólipos intestinales en un paciente trasplantado renal y con enfermedad de Crohn – un diagnóstico inesperado

A 41-year-old male, journalist, with a history of ileal Crohn's disease (CD), stricturing phenotype, diagnosed in 2011, and renal transplant in 2014 due to IgA nephropathy. He referred several trips to the Middle East in recent years and he was immunosuppressed with tacrolimus and prednisolone. Due to CD activity and malabsorption of immunosuppressive drugs, infliximab was initiated a few months after transplant, with clinical improvement. Two years later, the patient reported a slight increase of his bowel movements. Physical examination was relevant for hepatosplenomegaly. Lab workup showed pancytopenia and stool cultures were negative. The ileocolonoscopy showed scarring areas and pseudopolyps of the terminal ileum and the right colon (Fig. 1). Biopsies were performed in the right colon and in the terminal ileum, and the pathological exam revealed preservation of the glandular architecture of the mucosa, with an inflammatory lymphoplasmocytic infiltrate and macrophages with spherical and small amastigotes structures of *Leishmania spp* (Fig. 2). Polymerase chain reaction analysis of the biopsy specimens was performed and confirmed the presence of *Leishmania infantum*. HIV

screening test was negative. The patient started therapy with liposomal amphotericin B.

Leishmaniasis is a chronic protozoan disease of the mononuclear phagocytic system.¹ *Leishmania spp* is endemic in several regions of the world, including the Mediterranean area.¹ The incubation period is usually long, and under conditions of immunosuppression, there is evidence of activation of latent infection several years after exposure to the parasite.¹ TNF- α has a major role in mediating host protection against visceral leishmaniasis (VL), so the use of anti-TNF agents may potentially cause worsening or reactivation of latent infection.^{1,2}

Cutaneous leishmaniasis is the most common leishmanial syndrome worldwide.³ VL, which reflects dissemination of *Leishmania* parasites throughout the reticuloendothelial system, is potentially life threatening without treatment.² VL is a systemic disease characterized by hepatosplenomegaly, fever, cachexia, hypergammaglobulinaemia, and pancytopenia.¹ Nevertheless, asymptomatic leishmanial infection has been reported previously.¹

The diagnosis of enteric VL is histological, requiring visualization of amastigotes inside macrophages of the intestinal lamina propria.^{4,5} A characteristic endoscopic image of this invasion has not been described so far, and the diagnosis is established by taking biopsies.^{4,5} A correct diagnosis of VL is challenging and easy to miss, especially in cases that are not clinically suspected, as the case reported. Liposomal amphotericin B is the preferred treatment choice.⁵

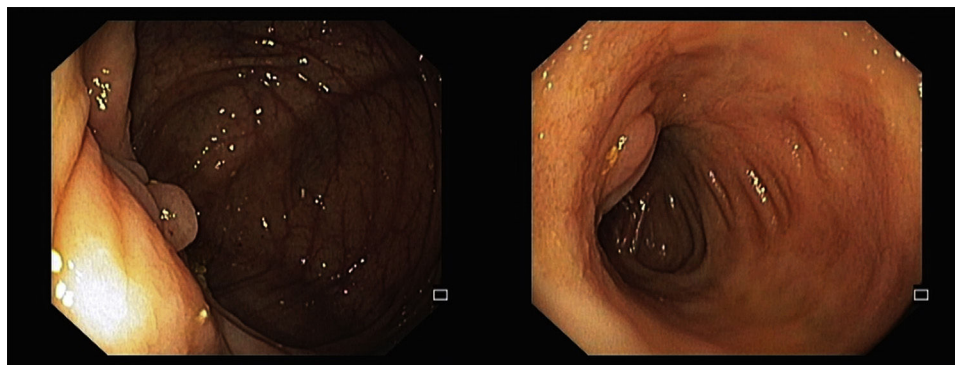


Figure 1 Ileocolonoscopy imaging showing scars and pseudopolyps of the terminal ileum and the ileocecal valve.