

- nóstico endoscópico. Reporte de caso. *Rev Gastroenterol Mex.* 2022;87:113–6, <http://dx.doi.org/10.1016/j.rgmx.2021.02.007>.
- Mosquera-Klinger G, Ucroz A. Enfermedad de Crohn frente a tuberculosis intestinal: un diagnóstico diferencial desafiante. Revisión de tema. *Rev Colomb Gastroenterol.* 2018;33:423–30, <http://dx.doi.org/10.22516/25007440.172>.
 - Kedia S, Das P, Madhusudhan KS, et al. Differentiating Crohn's disease from intestinal tuberculosis. *World J Gastroenterol.* 2019;25:418–32, <http://dx.doi.org/10.3748/wjg.v25.i4.418>.
 - Merino-Gallego E, Gallardo-Sánchez F, Gallego-Rojo FJ. Intestinal tuberculosis and Crohn's disease: the importance and difficulty of a differential diagnosis. *Rev Esp Enferm Dig.* 2018;110:650–7, <http://dx.doi.org/10.17235/reed.2018.5184/2017>.
 - Lu Y, Chen Y, Peng X, et al. Development and validation of a new algorithm model for differential diagnosis between Crohn's disease and intestinal tuberculosis: a combination of labora-

tory, imaging and endoscopic characteristics. *BMC Gastroenterol.* 2021;21:291, <http://dx.doi.org/10.1186/s12876-021-01838-x>.

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Response to Montes-Arcón regarding ‘‘Tuberculosis and Crohn’s disease – a challenging endoscopic diagnosis. A case report’’



Respuesta a Montes-Arcón sobre «Tuberculosis y enfermedad de Crohn. Desafío en el diagnóstico endoscópico. Reporte de caso»

Dear Editor,

We appreciate the interest Dr. Montes-Arcón showed in our case report, ‘‘Tuberculosis and Crohn’s disease – a challenging endoscopic diagnosis’’¹. The primary aim of presenting our case was to provide evidence of and review the clinical and endoscopic characteristics of the two entities. Even though they have similarities, several of their differences should be underlined to help distinguish one from the other, both clinically and during the endoscopic procedure, to aid clinical gastroenterology specialists in making the accurate diagnosis, while in no way devaluing the role of other physicians that make up the multidisciplinary team managing the two diseases.

The role of the pathologist in the approach to the two entities is undeniable and we share the belief that the definitive diagnosis depends on the analysis of the pathologic anatomy. We recognize the challenge involved in that analysis, given that the two diseases share a considerable number of histologic characteristics that include architectural anomalies (crypt distortion, non-parallel crypts, variable diameters or cystically dilated crypts, crypt branching that involves more than 2 branched crypts, crypt shortening, reduced crypt density, and irregular mucosal surfaces) and inflammatory features (focal/patchy inflammation, basal plasmacytosis, increase in intraepithelial lymphocytes, transmucosal inflammation, focal cryptitis,

aphthous ulcers, disproportionate submucosal inflammation, proximal location of the ulceration and architectural distortion, pseudopyloric metaplasia in the ileum, Paneth cell metaplasia in the colon, and granulomas)^{2,3}.

However, despite the difficulties, there are some histologic criteria that enable an adequate distinction to be made, based on the granulomas found. In intestinal tuberculosis, granulomas tend to be larger, have a central formation of caseous tissue, are located in the submucosa, have granulomatous non-mucosal involvement of the surrounding lymph nodes, disproportionate inflammation of the submucosa, and linear ulceration with clusters of epithelioid histiocytes. With respect to Crohn’s disease, the findings included architectural distortion at a distance from the granulomatous inflammation, focally improved colitis, and muscular obliteration of the mucosa^{3,4}.

Clinical, endoscopic, and imaging differentiation is of great use to the pathologist, when despite his/her analysis, the entities cannot be distinguished, or a definitive diagnosis made. Thus, said differentiation aids in guiding the diagnosis. Other techniques, such as *Mycobacterium* species cultures, polymerase chain reaction testing for mycobacteria, and histochemical staining for acid-alcohol-fast bacilli (Ziehl-Neelsen) can also be useful^{3,5}.

We agree that the approach to the patient suspected of presenting with intestinal tuberculosis versus Crohn’s disease is a multidisciplinary one, and the majority of times involves gastroenterologists, general surgeons, imaging specialists, anatomopathologists, and others.

Ethical considerations

The authors declare that they met all the ethical responsibilities regarding data protection, the right to privacy, informed consent.

Authorization by the institutional ethics committee was not needed because at no time were patient anonymity norms not met or violated, and no experimental procedures were performed that could endanger the patient.

The authors declare that this article contains no personal information that could identify patients.

☆ Aguirre-Padilla LM, Madrid-Villanueva BE, Ugarte-Olvera ME, Alonso-Soto J. Respuesta a Montes-Arcón sobre «Tuberculosis y enfermedad de Crohn. Desafío en el diagnóstico endoscópico. Reporte de caso». *Rev Gastroenterol Méx.* 2022;87:399–400.

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Conflict of interest

The authors declare that there is no conflict of interest.

References

1. Aguirre-Padilla LM, Madrid-Villanueva BE, Ugarte-Olvera ME, Alonso-Soto J. Tuberculosis y enfermedad de Crohn. Desafío en el diagnóstico endoscópico. Reporte de caso. *Rev Gastroenterol Mex.* 2022;87:113–6, <http://dx.doi.org/10.1016/j.rgmx.2021.02.007>.
2. Kedia S, Das P, Madhusudhan KS, et al. Differentiating Crohn's disease from intestinal tuberculosis. *World J Gastroenterol.* 2019;25:418–32, <http://dx.doi.org/10.3748/wjg.v25.i4.418>.
3. Montes-Arcón PS. La visión del patólogo en el diagnóstico diferencial entre la enfermedad de Crohn y la tuberculosis intestinal. *Rev Gastroenterol Mex.* 2022, <http://dx.doi.org/10.1016/j.rgmx.2022.03.009>, in press.
4. Merino-Gallego E, Gallardo-Sánchez F, Gallego-Rojo FJ. Intestinal tuberculosis and Crohn's disease: the importance and difficulty

of a differential diagnosis. *Rev Esp Enferm Dig.* 2018;110:650–7, <http://dx.doi.org/10.17235/reed.2018.5184/2017>.

5. Lu Y, Chen Y, Peng X, et al. Development and validation of a new algorithm model for differential diagnosis between Crohn's disease and intestinal tuberculosis: a combination of laboratory, imaging and endoscopic characteristics. *BMC Gastroenterol.* 2021;21:291, <http://dx.doi.org/10.1186/s12876-021-01838-x>.

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Preoperative suspicion of difficult laparoscopic cholecystectomy Sospecha preoperatoria de colecistectomía laparoscópica difícil



Dear Editor:

Laparoscopic cholecystectomy is the first therapeutic option in gallstone disease. Acute cholecystitis is a risk factor for complication in laparoscopic cholecystectomy and a significantly associated predictive factor of conversion to open cholecystectomy¹, which is a safer treatment alternative in those patients.

With great interest, I reviewed the retrospective case-control study by Morales-Maza et al.² on the controversial subject of laparoscopic cholecystectomy conversion to open surgery that was conducted at a tertiary care hospital. The study proposed a risk factor analysis based on clinical, laboratory, and ultrasound parameters, concluding that patients above 50 years of age, male sex, and ultrasound findings of gallbladder wall thickening and the presence of pericholecystic fluid are factors for conversion to open cholecystectomy, with 84% sensitivity of the risk factor summation pathway.

In 2018, Al Masri et al.³ carried out a retrospective study in which they concluded that the predictive variables for conversion were advanced age, male sex, and significant

comorbidities, such as chronic obstructive or restrictive lung disease and anemia, with hemoglobin levels below 9 g/dl, as well as a history of previous laparotomies, resulting in a conversion rate of 1.03%. The most frequent intraoperative causes for conversion were the perception of difficult anatomy or inadequate visualization of structures due to the presence of severe adhesions or a significant inflammatory process. The patients that required conversion had longer periods of hospitalization.

In 2019, an international, multicenter, prospective study was conducted to evaluate an intraoperative scoring system to achieve a surgical classification to predict the indication for conversion of elective or emergency laparoscopic cholecystectomy to the open procedure. The scoring of cholecystitis severity was based on 4 components: the surgical appearance of the gallbladder (adhesions covering more than 50% of the gallbladder or less than 50%); distension/contraction (a distended or contracted gallbladder, impossibility to grasp the gallbladder without decompression, a stone larger than 1 cm impacted in a Hartmann pouch); ease of access (body mass index above 30 or limitation due to adhesions from previous surgeries); and the presence of sepsis in the peritoneal cavity (biliary peritonitis or purulent fluid), as well as the presence of a cholecystoenteric fistula. The total score was 10 points (G10). If the G10 system score was less than 2 points, the gallbladder surgery was classified as easy, a score of 2–4 points was classified as moderate, 5–7 points as difficult, and 8–10 points as extreme. Twenty-two percent of the patients were found to have gallbladder surgeries that were considered difficult or extreme. The surgeries were converted in 14% of the patients, but 33% of those conversions were in patients with G10 scores ≥ 4 .

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