



SCIENTIFIC LETTER

An infrequent cause of left-colon intussusception



Una causa infrecuente de intususcepción de colon izquierdo

Mantle cell lymphoma (MCL) is a type of B-cell non-Hodgkin's lymphoma that is characterized by atypical small lymphoid cells within the mantle zone that surrounds normal germinal center follicles.¹ Represents 2.5% of lymphoid neoplasms in United States and 7–9% of lymphoid neoplasms in Europe.² MCL is usually diagnosed in adults with a median age of 68 years with male predominance.³ The gastrointestinal tract is the most frequent secondary extranodal location, and colon is the most involved site.¹ Multiple lymphomatous polyposis is one of the most common primary gastrointestinal presentations of MCL.¹

Intussusception caused by malignant lymphoma is unusual, accounting for less than 10% of all cases of colonic intussusception.³ Colonic involvement of gastrointestinal lymphomas is observed in 9–27%, although MCL represents only 1.2% of these lesions.⁴ We present the case of a patient with a diagnosis of MCL relapse manifested as left colo-colonic intussusception.

A 65-year-old man with a diagnosis of MCL 8 years ago treated with chemotherapy and autologous transplantation of hematopoietic precursors with good response and without evidence of recurrence in the later control (4 months before) presented with intermittent abdominal pain in the left lower quadrant without fever, weight loss, or diarrhea. On physical exam there were no significant findings. The blood count and biochemical study were within normal limits. Abdominal computed tomography (CT) identified a colo-colonic intussusception in descending colon associated with an endoluminal lesion that showed homogeneous enhancement (Fig. 1A). A colonoscopy was performed and identified a 50 mm pedunculated lesion in the descending colon (Fig. 1B). Biopsies of this lesion showed a lymphoproliferative infiltration (chromatin positive lymphocytes and positive immunostaining for CD20 and cyclin) in the lamina propria compatible to MCL. A multidisciplinary evaluation was carried out and treatment with oral ibrutinib 560 mg qd was started with initial good response. After 6 months of follow up, ibrutinib was finished and a new allogeneic transplantation of hematopoietic precursors was performed with good response after 3 months of follow-up.

The main proportion of patients with MCL relapse after combined therapy (chemotherapy and hematopoietic stem cell transplantation) have a median survival of 3–5 years.²

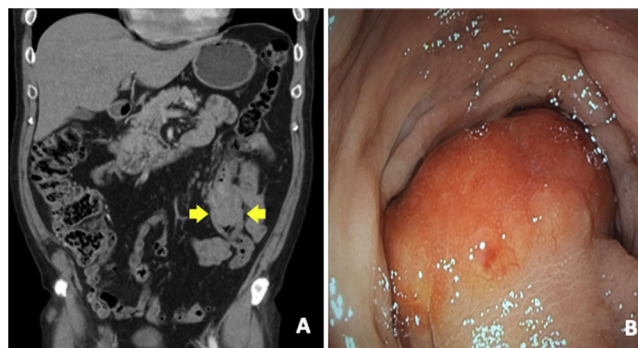


Figure 1 (A) Abdominal computed tomography. Colo-colonic intussusception in descending colon (arrows). (B) Colonoscopy: pedunculated lesion located in the descending colon.

In the present case, MCL relapse was manifested as a single polypoid lesion of the descending colon causing colonic non-obstructive intermittent intussusception. Intussusception in adults is infrequent and represent less than 1% of bowel obstruction.³ In the colon, 60% of intussusception cases are related to malignancy.² After reviewing the literature related to clinical manifestations of MCL, no case of left colonic intussusception was described as MCL presentation and few cases presenting ileocecal or right colo-colonic intussusception were described.⁵

In conclusion, we present a case of left colo-colonic intussusception associated with MCL relapse. This presentation has not been previously reported. This case reinforces the importance of differential diagnosis of MCL recurrence in adult patients with history of MCL and left colon obstruction.

Authors' contribution

Mathius Soruco García, Mariano Higa and Domingo Balderamo wrote the manuscript. All authors approved the submitted version.

Disclosures

None of the authors have any potential conflicts (financial, professional, or personal) to disclosure.

Funding

The present manuscript was performed without any financial support or grant.

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Mathius Soruco García, Mariano Higa, Domingo Balderramo*

Gastroenterology Department, Hospital Privado Universitario de Córdoba, Instituto Universitario de Ciencias Biomédicas de Córdoba, Córdoba, Argentina

* Corresponding author.

E-mail address: dbalderramo@hospitalprivadosa.com.ar (D. Balderramo).

<https://doi.org/10.1016/j.gastrohep.2022.08.006>

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Enteroinvasive bacteria. Local study in specialized clinical care



Bacterias enteroinvasivas. Estudio local en atención clínica especializada

Severe acute infectious diarrhoea is a serious public health problem worldwide. In diarrhoea of bacterial origin, except for that caused by *Clostridioides difficile*, most are invasive in nature¹ and antibiotic therapy may be necessary in some specific situations. Knowing the susceptibility to different classic and alternative antimicrobials is therefore crucial, as the number of episodes of enteritis caused by multidrug-resistant pathogens is increasing.^{2–5} The aim of this study was to analyse the rate of sensitivity to antibiotics, as well as the ability to predict the sensitivity of *Salmonella* to ciprofloxacin through susceptibility to nalidixic acid.

We conducted a retrospective descriptive study on the results of the stool cultures recorded in our Laboratory Information System due to episodes of enteritis from January 2016 to December 2019. The geographical area was the province of Granada and the population in scope was the Hospital Universitario Virgen de las Nieves catchment area, with a basic reference population of 330,486, but which provides tertiary healthcare. The population treated came from specialised care (including hospital in-patients, outpatient clinics and the Accident and Emergency department). Express information on symptoms was lacking. Non-solid faeces were transported and processed following a strict working protocol.¹ The MicroScan system (Beckman Coulter, Barcelona, Spain) was used to determine the sensitivity of rapidly growing microorganisms. The minimum inhibitory concentration (MIC) of azithromycin and fosfomicin was determined by diffusion gradient (MIC Test Strip, Liofilchem®, Italy). When there was a breakpoint, results were interpreted following the guidelines of the European Committee on Antimicrobial Susceptibility Testing (2020) (https://www.eucast.org/fileadmin/src/media/PDFs/EUCAST_files/Breakpoint_tables/v_10.0/Breakpoint_Tables.pdf). Absolute and relative frequencies were calculated for the categorical variables, and measures of central tendency and dispersion for the

numerical variables. We used the χ^2 test for the statistical analysis of categorical variables and Student's *t*-test to analyse the numerical variables, such as age. The data were analysed with the IBM® SPSS® Statistics program.

For this study, there were 9290 negative stool cultures and 1160 microorganisms were isolated from 1080 (10.4%) different episodes. In general, *Campylobacter* (additional Table 1 in the Appendix A) was the most isolated ($P < .001$), and *Campylobacter jejuni* was the most common. The year with the most positive stool cultures was 2017 ($P < .001$), followed by 2019 (additional Table 2 in the Appendix A). The rate of *Campylobacter* increased in the last year ($P = .008$); the *Salmonella* rate was highest in 2017 ($P < .001$) and *Aeromonas* remained stable ($P = .52$). *Campylobacter* and *Salmonella* were more common in summer and autumn ($P = .002$ and $P < .001$, respectively). There were more isolates in the child population than in adults (60.2% vs 39.8%), despite there being more adult samples (69.3% vs 30.7%), so the yield of stool culture is higher in the child population (15% vs 4%; $P < .001$). Overall, 64.8% of *Campylobacter* ($P < .001$), 54% of *Salmonella* ($P = .009$) and 61.1% of *Aeromonas* were detected in the child population ($P = .002$). In patients under a year old, *Campylobacter* was the most isolated species, followed by *Aeromonas*. In the adult population, the most commonly isolated pathogens were the same as in the paediatric population (additional Table 3 in the Appendix A). In most of the patients, a single pathogen was detected, in 56 patients two were isolated simultaneously; of these, in 96.4% of the episodes, one of the microorganisms was *Aeromonas*. The most common accompanying pathogen in co-infection with *Aeromonas* was *Campylobacter*. Of the co-infections with *Aeromonas*, 85.2% occurred in children, primarily under one year of age.

The antibiotic sensitivity is shown in Table 1. Interesting is the low sensitivity of *Campylobacter* to ciprofloxacin, given that in some cases of severe acute diarrhoea empirical treatment with quinolones is started, and the fact that *Campylobacter jejuni* is the most detected microorganism in stool cultures. The results of the sensitivities to nalidixic acid and ciprofloxacin in *Salmonella* are shown in additional Tables 4 and 5 in the Appendix A. In general, susceptibility to nalidixic acid quite accurately predicted susceptibility to