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Endoscopic Aspect of a Severe CMV Colitis induced by Azathioprine in a Patient with Ulcerative Colitis

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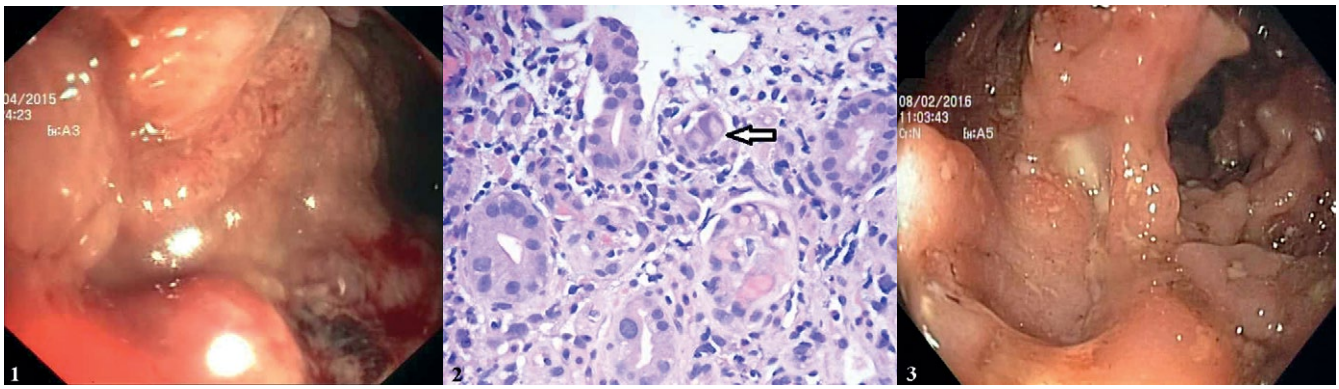

We present the case of a 26 year-old male with a personal history of proctosigmoiditis, who developed a severe relapse, triggered by broad-spectrum antibiotherapy received in another medical unit with a brief course of IV corticoids and azathioprine.

The patient presented to our clinic in a severe condition, with more than ten bloody stools per day, incontinence for faeces, abdominal pain, pallor and weight loss. Biological tests showed severe hypochromic anemia, hypoalbuminemia and nonspecific inflammatory syndrome. *Clostridium difficile* toxin was negative and stool culture did not reveal any pathogen including enterohemorrhagic *E. coli, Salmonella, Shigella* and *Yersinia* species. Serology tests showed high levels of serum anti-CMV (Cytomegalovirus) IgG and IgM antibodies. Sigmoidoscopy performed with care revealed severe colitis on the distal 30 cm of the colon, consistent with ulcerative colitis (UC), with large, irregular ulcers ("punched-out" and "geographic" ulcers) (Fig. 1). The H&E (x400) staining of the colorectal biopsy showed cytomegalic cells containing basophilic intranuclear inclusions ("owl's eye" appearance) (Fig. 2, arrow). Immunohistochemistry confirmed the presence of CMV antigens in the colonic mucosa.

Despite efficient antiviral therapy, the infection added to morbidity of the underlying UC. Within months, the disease progressed from limited proctosigmoiditis to severe pancolitis, with "carpet like" pseudopolyps from rectum to cecum and deep ulcers (Fig. 3). The patient experienced multiple flare-ups resistant to medical therapy and ultimately required a total proctocolectomy.

Cytomegalovirus is considered an ubiquitous infection and an opportunistic disease. CMV colitis was reported in 5% of the patients with UC [1], more frequent in severe flare-ups and steroid refractory UC (35%) [2], altering the outcome of the underlying disease [3-5].

Most studies did not find any significant endoscopic features to discriminate CMV colitis from UC [5]. CMV colitis may be suggested by "geographic ulcers" (>5 mm, irregular), punched-out or longitudinal ulcers [6], considered highly specific, even though rarely seen on endoscopy.

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Conflicts of interest: None to declare.

REFERENCES

1. Domenech E, Vega R, Ojanguren I, et al. Cytomegalovirus infection in ulcerative colitis: a prospective, comparative study on prevalence and diagnostic strategy. Inflamm Bowel Dis 2008; 14: 1373–1379. doi: 10.1002/ibd.20498
2. Criscuoli V, Casa A, Orlando A, et al. Severe acute colitis associated with CMV: a prevalence study. Dig Liver Dis 2004; 36: 818–820. doi: 10.1016/j.dld.2004.05.013
3. De Castro ML, Tardio A, del Campo V, et al. A comparative study of two histological techniques for the identification of cytomegalovirus infection in colorectal biopsies from patients with chronic inflammatory bowel disease. Rev Esp Enferm Dig 2009; 101: 697-705.
4. Dumitru IM, Dumitru E, Resul G, Curtali L, Paris S, Rugina S. Concomitant CMV and Clostridium difficile colitis in an immunocompetent patient treated with Ganciclovir and fecal transplantation. J Gastrointest Liver Dis 2014; 23: 221-222.
5. Roblin X, Pillet S, Oussalah A, et al. Cytomegalovirus load in inflamed intestinal tissue is predictive of resistance to immunosuppressive therapy in ulcerative colitis. Am J Gastroenterol 2011; 106: 2001–2008. doi: 10.1038/ajg.2011.202
6. Suzuki H, Kato J, Kuriyama M, Hiraoka S, Kuwaki K, Yamamoto K. Specific endoscopic features of ulcerative colitis complicated by cytomegalovirus infection. World J Gastroenterol 2010; 16: 1245–1251. doi: 10.3748/wjg.v16.i10.1245