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Mycofenolate-induced ileocolitis

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Dear Editor,

Terminal ileitis is a common finding in clinical practice and often associated with Crohn's disease (CD). However, other pathologies must be considered, particularly in particular cases, resulting from side effects of drugs, such as mycophenolate mofetil (MMF) and mycophenolate sodium (MS). These are immunosuppressive medication for the management of various autoimmune diseases and prevention of allograft rejection. Gastrointestinal mucosal injuries related to this medication are common and include those related to suppression of immune function, drug interaction, and metabolism (suppression of *de novo* purine synthesis)(1). Gastrointestinal (GI) side effects are seen 45% of the time and they include nausea, vomiting, constipation, diarrhea, and colitis(2,3).

We present the case of an 18-year-old female, that underwent renal transplant when thirteen years old for unknown renal disease. With allograft chronic disfunction, medicated with MS, tacrolimus, and prednisolone. Admitted for normocytic, normochromic anemia, with hemoglobin 5,8g/dL, diagnosed in routine exams. She referred abdominal pain and diarrhea (4–5/day), without blood or mucus, for several months and weight loss (3 Kg in the previous month). Etiologic study revealed normal erythropoietin and no deficit of iron, folic acid or B12 vitamin. Coombs test and anti-transglutaminase antibodies were negative and



immunophenotyping revealed reactive changes. Infection was excluded. Esophagogastroduodenoscopy and posterior gastric and duodenal histology were normal. Abdominal ultrasound revealed terminal ileum wall thickness, extending through 6,6 cm. lleocolonoscopy was made, with normal ileal mucosae but congestive cecum mucosae with superficial ulcers (figure 1). Histology revealed unspecific chronic inflammation (crypt distortion with increased lamina propria inflammation). She presented clinical improvement and hemoglobin stability (8,1 g/dL) and was discharged. After multidisciplinary discussion, with gastroenterology and transplantation teams, MS was suspended for suspicious of associated enterocolitis. After four months of suspension, she was asymptomatic, recovered from anemia (14g/dL), with significant improvement of her appetite and subsequent weight gain, presenting a normal abdominal ultrasound. At the most recent follow-up, 2 years later, she was in excellent clinical condition with no GI manifestations.

This case emphasizes the challenge diagnosing ileocolitis and demonstrate clinical and endoscopic changes in MS induced lesions that can be similar to those in Chron's disease. Although enteric-coated MS has a delayed absorption from the GI tract in comparison with MMF, thereby potentially reducing GI adverse events, the difference seems not to be statistically significative(4,5). The GI symptoms can occur between 6 months to 15 years after beginning therapeutic. Mostly patients improve after therapeutic withdrawal or dose reduction(3).



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Fig. 1. Colonoscopic image showing segmental colitis with congestive cecum mucosae and superficial ulcers