

A rare case of multiple colonic ulcers revealed by hematochezia

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ABSTRACT

Introduction. The colonic pathology associated with the administration of nonsteroidal anti-inflammatory drugs is vast and includes inflammation, ulcerations and sometimes strictures. It is important to identify the NSAIDs-induced alterations in the colon in order to differentiate them from other pathologies and to avoid treatment errors.

The **objective** of this paper is to present a post-NSAIDs colopathy revealed by lower digestive bleeding – hematochezia.

Material and methods. A 68 years old patient under treatment with NSAIDs is hospitalized for hematochezia. Laboratory tests, upper and lower digestive endoscopy are performed and multiple colonic ulcers are identified.

Results. Following the investigations, the suspicion of post-NSAIDs colonic ulcers is raised and a differential diagnosis with inflammatory bowel disease is sought by taking multiple biopsies. The histopathological examination shows ischemic necrosis, with no pathognomonic elements linked to Crohn's disease.

Conclusions. The peculiarity of this case resides in the importance of identifying the NSAIDs-induced pathology and differentiating it from other pathologies to prevent treatment errors. Associating multiple ulcers in NSAIDs pathology is rare and often misdiagnosed as Crohn's disease. Keep in mind the importance of the histopathologic exam, which excluded the inflammatory bowel disease in a patient with inconclusive inflammatory biological evidence.

Keywords: colonic ulcers, colopathy, NSAIDs

INTRODUCTION

Nonsteroidal anti-inflammatory drugs (NSAIDs) are associated with a variety of gastrointestinal side effects that have been reported with increasing frequency due an increment in life expectancy and because of possible new and developing indications in vascular disease and cancer prevention. Resulting from direct toxicity on the bowel mucosa, nonsteroidal anti-inflam-

matory drug (NSAID)-induced colitis is an underestimated although potentially serious condition (1,2).

The colonic pathology associated with the administration of nonsteroidal anti-inflammatory drugs is vast and includes inflammation, ulcerations and sometimes strictures. It is important to identify the NSAIDs-induced alterations in the colon in order to differentiate them from other pathologies and to avoid treatment errors.

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Most commonly, isolated ulcers are found especially in the cecum and ascending colon, but also in the rectum (3,4).

High clinical suspicion and appropriate patient questioning, together with endoscopic findings, should help physicians not to miss this important diagnosis.

The objective of this paper is to present a post-NSAIDs colopathy revealed by lower digestive bleeding – hematochezia.

CASE PRESENTATION

A 68-year-old man presented to our hospital with repeated hematochezia started 8 hours prior admission. Anamnesis revealed that the patient was known with Pean-Billroth gastrectomy for duodenal ulcer 40 years before, deep venous thrombophlebitis of the right lower limb under oral anticoagulant therapy and erysipelas, under treatment with NSAIDs. Laboratory tests highlight a mild macrocytic anemia, mild leukocytosis and iatrogenic coagulopathy. An upper digestive endoscopy was performed that shows

Pean-Billroth I gastrectomy and no other lesions with bleeding potential.

Therefor a lower digestive endoscopy was performed which reveals in the right colon multiple fibrin-covered ulcerations with dimensions varying between 0.4 and 0.7 cm, separated by normal mucosa (Fig. 1).

Following the investigations, the suspicion of post-NSAIDs colonic ulcers is raised and a differential diagnosis with inflammatory bowel disease is sought by taking multiple biopsies. The histopathological examination shows focal active colitis, ischemic necrosis, increased apoptosis in crypts and mucosal and submucosal fibrosis, with no pathognomonic elements linked to Crohn's disease, supporting the diagnosis of NSAIDs-induced ulcers.

We initiated treatment with Mesalazine with good outcome.

This case highlights the importance of anamnesis with a careful history taking, together with awareness of endoscopic and histological findings, allowing a timely diagnosis of nonsteroidal anti-inflammatory drug-induced colitis.

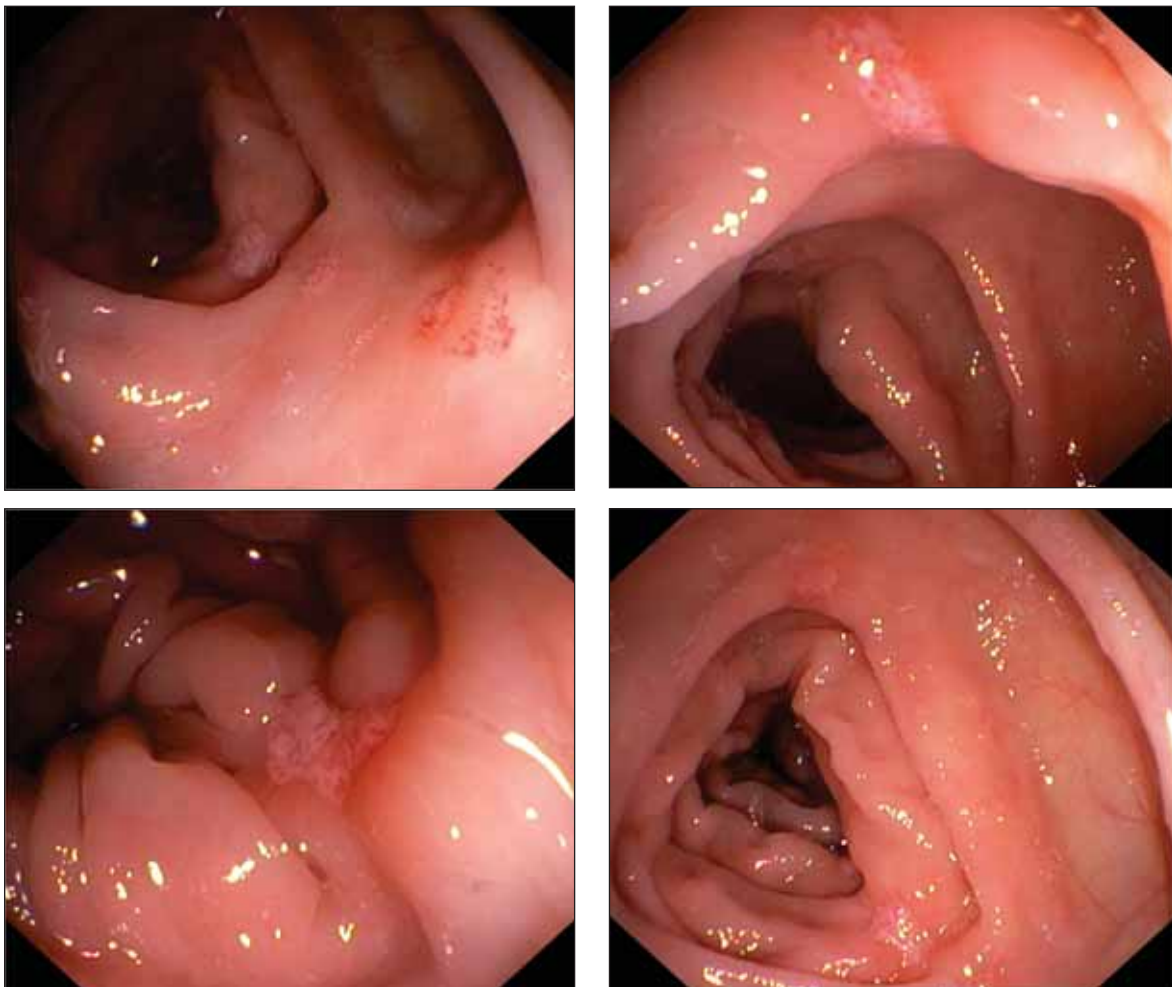


FIGURE 1. Multiple colonic fibrin-covered ulcerations

DISCUSSION

Hematochezia, as a presenting manifestation of NSAIDs-induced colonic ulcers, is rare and data regarding clinical and imagistic features is lacking. In most cases the patient presents with non-specific symptoms like mild anemia with iron-deficiency and positive fecal blood tests. A positive diagnosis requires a high clinical suspicion and appropriate patient questioning, together with a good differential diagnosis, endoscopic and histopathological examination (5).

Nonsteroidal anti-inflammatory drugs (NSAIDs) are well known for their ability to cause gastrointestinal side effects through numerous mechanisms, both systemic by inhibition of prostaglandin synthesis and uncoupling mitochondrial phosphorylation, and also topical by disrupting the epithelial cell barrier due to their weak acid characteristic (6,7).

NSAIDs colopathy is a frequently unsuspected cause of lower gastrointestinal bleeding, mostly characterized by inflammatory changes, solitary or multiple ulcers, diaphragm-like strictures, ischemic colitis, and eosinophilic colitis after prolonged use of NSAIDs. Although, the majority of mucosal changes can be found in the right colon, all segments are likely to be affected (8,9).

The prevalence of NSAID-related colon pathology is rising because of the increasing use of NSAIDs, and also due to the increasing use of enteric coated and slowrelease formulas, which may result in more of the active drug being delivered to the colon (10,11).

We presented the case of a patient with hematochezia due to NSAIDs-induced colonic ulcers with inconclusive biological evidence, a diagnosis highlighted by endoscopic finding and supported by the histopathological examination, which differentiated NSAIDs colopathy from other colonic disorders.

The gold standard in the diagnosis of any lower gastrointestinal bleeding remains the use of endoscopic techniques together with the histopathological findings from biopsy specimens.

A high awareness of the clinical, endoscopic, and histopathological aspects of NSAIDs-induced colopathy allows us to differentiate them from other colonic pathologies and to prevent misdiagnosis of inflammatory bowel disease and malignancy in these patients, thus avoiding treatment errors.

CONCLUSIONS

The peculiarity of this case resides in the importance of identifying the NSAIDs-induced pathology and differentiating it from other pathologies to prevent treatment errors. Associating multiple ulcers in NSAIDs pathology is rare and often misdiagnosed as Crohn's disease. Keep in mind the importance of the histopathological exam, which excluded the inflammatory bowel disease in a patient with inconclusive inflammatory biological evidence. Increased awareness of this condition should reduce morbidity through both prevention and early recognition.

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