

A Case of NSAID Colopathy where the Culprit is Evidenced on the Colonoscopy

Patricia Guzman Rojas^{1*}, Reetika Sachdeva¹, Jignesh Parikh² and Le-Chu Su^{1,3}

¹Department of Internal Medicine, University of Central Florida, Orlando, Florida, USA

²Department of Pathology, Orlando VA Medical Center, Orlando, Florida, USA

³Department of Gastroenterology, University of Central Florida Health Clinic, Orlando, Florida, USA

***Corresponding Author:** Patricia Guzman Rojas, Department of Internal Medicine, University of Central Florida, Orlando, Florida, USA.

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Abstract

NSAIDs are commonly used pain medications, with a wide range of complications ranging from dyspepsia to acute renal failure. Though it has been reported several times, colopathy is a commonly overlooked condition associated to this medication. We present a 56-year-old man with past medical history chronic back pain with no gastrointestinal symptoms who presents to the gastroenterology clinic for a screening colonoscopy. His laboratory results revealed only mild anemia. Colonoscopy showed erosions in the cecum and ileocecal valve and few patchy aphthae in the sigmoid and descending colon, with a pill seen on top of one the aphthae. Biopsies revealed features of medication induced colopathy. On further questioning, the patient reported chronic intake of diclofenac and meloxicam for the past five years.

The clinical presentation of NSAID colopathy can vary from non-specific symptoms to being completely asymptomatic, as seen in our patient. The endoscopic appearance can elucidate inflammation, ulceration or fibrous diaphragm-like structures. The treatment is based on discontinuation of the NSAID; however colonic strictures can be surgically managed or by endoscopic dilation. This case can highlight the importance to consider the colon as one of the organs that can be injured by NSAID therapy. Furthermore, with proper and early diagnosis we can prevent life threatening complications from this entity

Keywords: NSAID Colopathy; Culprit; Colonoscopy

Introduction

Non-steroidal anti-inflammatory drugs (NSAID) are commonly used pain medications, with a wide range of complications ranging from dyspepsia to acute renal failure. NSAID colopathy is one of its lesser known side effects. Though it has been reported several times, it is a commonly overlooked condition responsible for lower gastrointestinal symptoms and anemia due to blood loss.

Case Presentation

A 56-year-old man with past medical history chronic back pain secondary to lumbar radiculopathy with no gastrointestinal symptoms presented to the gastroenterology clinic for a screening colonoscopy. His laboratory tests revealed a hemoglobin of 12.7 g/dL (with a baseline of 14.1 g/dL). The colonoscopy showed erosions in the cecum and ileocecal valve, a normal terminal ileum and a pill localized at the descending colon (Figure 1), when this tablet was removed it revealed a few patchy aphthae (Figure 2). Biopsies revealed colonic mucosa with architectural distortion and mildly increased crypt apoptosis, increased lamina propria eosinophils and rare eosinophilic abscess and crystal deposition, with negative cytomegalovirus stains (Figure 3). On further questioning, the patient reported intake of

diclofenac twice daily for the past four months, with a prior intake of meloxicam 15 mg daily for past five years. Other medications were oxybutynin, clonazepam and divalproex. His diclofenac was stopped, and a repeated hemoglobin after six months improved to 14.4 g/dL.

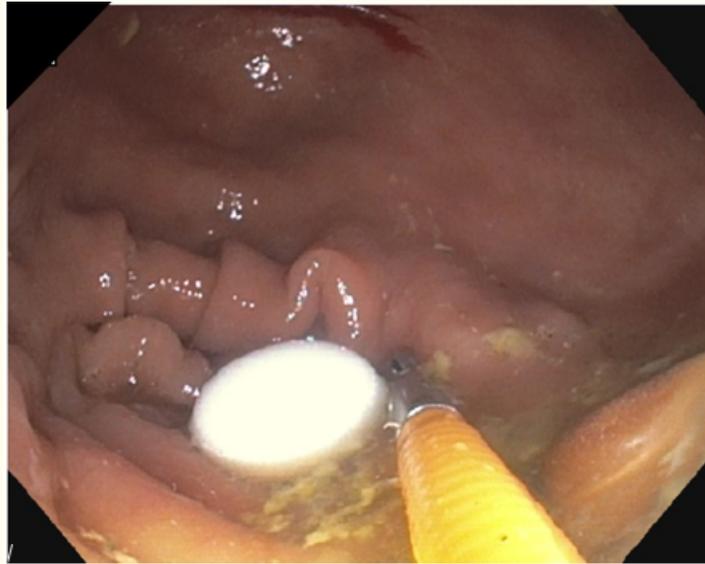


Figure 1: Colonoscopy showing the NSAID pill on top of erythematous aphthae.



Figure 2: Colonoscopy showing erythematous aphthae.

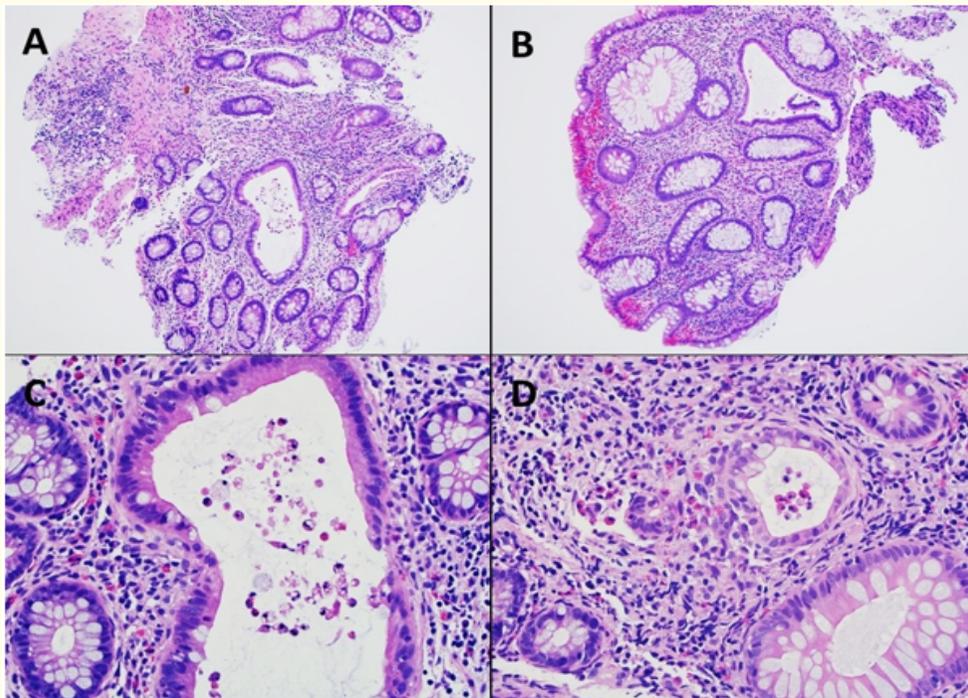


Figure 3: Colonic mucosa shows architectural distortion (Panel A and B), increased crypt apoptosis (Panel C and D), increased lamina propria eosinophils, and a few eosinophilic crypt abscesses. These findings are consistent with apoptotic enteropathy.

Discussion and Conclusion

Exist different proposed mechanisms of mucosa injury from NSAID colopathy: Reduced blood flow, epithelial damage and neutrophil adherence [1,2]. Since NSAIDs are commonly known for their upper gastrointestinal adverse effects, enteric-coated and slow release tablets have been increasingly dispensed during the last years. These formulas can induce a direct effect/injury to the small and large intestinal mucosa, predisposing the patient to the previously mentioned side effects [3]. The clinical presentation of this entity can vary from symptoms like weight loss, iron deficiency anemia, bloody diarrhea, abdominal pain, change in bowel habits to being completely asymptomatic, as seen in our patient [4]. On the other hand, the endoscopic features are most commonly found on the right colon and are characterized by: inflammation, well circumscribed ulcerations or thin fibrous diaphragm-like structures [5].

There is no established association between chronicity of NSAID use and colopathy, since short-term therapy can be sufficient to induce colitis. Neither there is evidence showing dose-related disease [6]. It is important to differentiate NSAID-colopathy from preparation-induced colitis given the similar macroscopic presentation, but increased erythema noted in the first one. Furthermore, other differential diagnosis are crohn's disease, ulcerative or ischemic colitis or malignancy [7]. The treatment is based on discontinuation of the NSAID; however, colonic strictures can be managed surgically or by means of endoscopic dilation.

We present this case due to the incidental finding of the NSAID tablet on images and also highlights the importance to consider the colon as one of the organs that can be injured by NSAID therapy. Additionally, with proper and early diagnosis we can prevent life threatening complications like GI bleeding and/or perforations.

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