

Bike Riding Leading to Ischemia of Highly Vascular Organ

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Introduction

Ischemic proctitis is a rare condition characterized by inflammation and injury to the rectal mucosa due to inadequate blood supply. It is a subtype of ischemic colitis that specifically affects the rectum. Although there is limited data on the incidence and prevalence of ischemic proctitis, it is considered to be a relatively uncommon condition. Diagnosing ischemic proctitis can be challenging due to its rarity and nonspecific clinical presentation, which may include rectal bleeding, abdominal pain, and changes in bowel habits. Treatment options for ischemic proctitis may involve conservative measures such as bowel rest, intravenous fluids, and antibiotics, or in severe cases, surgical intervention.

The condition is rare due to the rectum being a highly vascular organ and more cases should be reported to further understand the condition. We present a rare case of ischemic proctitis caused by trauma.

Case Summary

46 year old male with history of migraines presented to hospital for rectal pain with bright red blood per rectum and diarrhea. He had four days of five to six episodes of water diarrhea associated with abdominal and rectal pain. He initially noticed blood when wiping and then noticed it in the toilet water. Computed tomography demonstrated concern for proctitis. Patient underwent flexible sigmoidoscopy with cold forceps biopsies. Procedure demonstrated severe ulcerative proctitis with a large ulceration involving the distal 5cm of the rectum to the level of the anal verge with scattered superficial ulcers through the distal rectum as seen in Figure 1. There was

normal mucosa at the proximal rectum and sigmoid colon. The biopsies demonstrated extensive ulceration with hyalinized lamina propria, withered crypts and fibrin thrombi, confirming diagnosis of colonic mucosa with ulceration. Upon further questioning and follow up in the clinic, patient admitted to riding his bike for approximately eight hours per day for months; leading to the cause of patient's presentation. Bowel rest was recommended and patient had resolution of symptoms.





Figure 1: Both pictures demonstrating large ulceration involving distal 5cm of rectum

Discussion

Ischemic proctitis is rare due to the fact the rectum is such a highly vascular organ. It has nonspecific symptoms and therefore may be underdiagnosed. We also mention the importance of an early diagnosis due to severe cases leading to surgical intervention.

First, we review the blood supply of the colon and rectum in Figure 2, further emphasizing the rectum being a highly vascular organ.

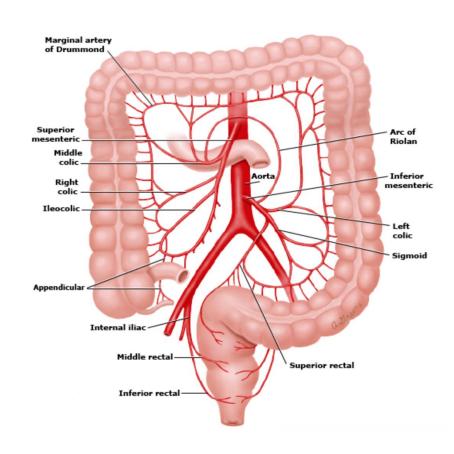


Figure 2: Blood supply of rectum

Important to note severe cases result in surgical intervention emphasizing diagnosing this condition early. Parades et al. (2018) focused on the role of endoscopy in diagnosing ischemic proctitis, which allows the physician to distinguish ischemic proctitis from other rectal pathologies. They highlighted characteristic endoscopic findings, such as ulcerations, friability, and loss of vascular pattern, which aid in establishing an accurate diagnosis.

Conclusion

Our case emphasizes a rare cause of ischemic colitis and we emphasize the importance of an early diagnosis to prevent surgical intervention.

References

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