



Baton Rouge General

Internal Medicine Residency Program

# Poor Bowel Preparation or Ileosigmoid Fistula?

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## Introduction

- Fistulas are a relatively common complication of severe Crohn's disease (CD), which affects up to 50% of patients.
- Fistula formation is believed to be secondary to bowel inflammation, leading to defects in the epithelial barrier. These defects can lead to penetration and breakdown of neighboring tissues, leading to the formation of a fistula.
- Here, the authors present a patient with an interestingly located fistula, preventing successful bowel preparation for colonoscopy.

## Case Description

- A 29 year old Caucasian male presented to his gastroenterologist with loose, mucus filled stools for two months. He denied current abdominal pain, unintentional weight loss, and fecal incontinence.
- The patient underwent colonoscopy, for which he completed 24 hour bowel preparation. The colonoscopy was terminated early, as stool was seen throughout the entire colon.
- Patient then completed 48 hour bowel preparation in anticipation for a second colonoscopy. The second colonoscopy again revealed stool throughout the entire colon [A], however it was noted that the sigmoid and rectum had improved preparation, with what appeared to be a possible fistula located 20 cm from the anus [B].
- Biopsies obtained during colonoscopy revealed findings concerning for CD. The patient then underwent CT abdomen and pelvis with oral and IV contrast [C] as well as MRI enterography, which revealed mural thickening and stricture of the terminal ileum and signs suggestive of an ileosigmoid fistula. The patient was then referred to colorectal surgery for bowel resection and fistulectomy.
- Ultimately, the patient had 17cm of the ileum and 10.5cm of the right colon resected. He was found to have an ileosigmoid fistula measuring 2.5cm, which was resected along with 10.5cm of the sigmoid and rectum.

## Figures



Figure A: Poor bowel preparation of the transverse colon



Figure B: Suspected fistula in the sigmoid colon

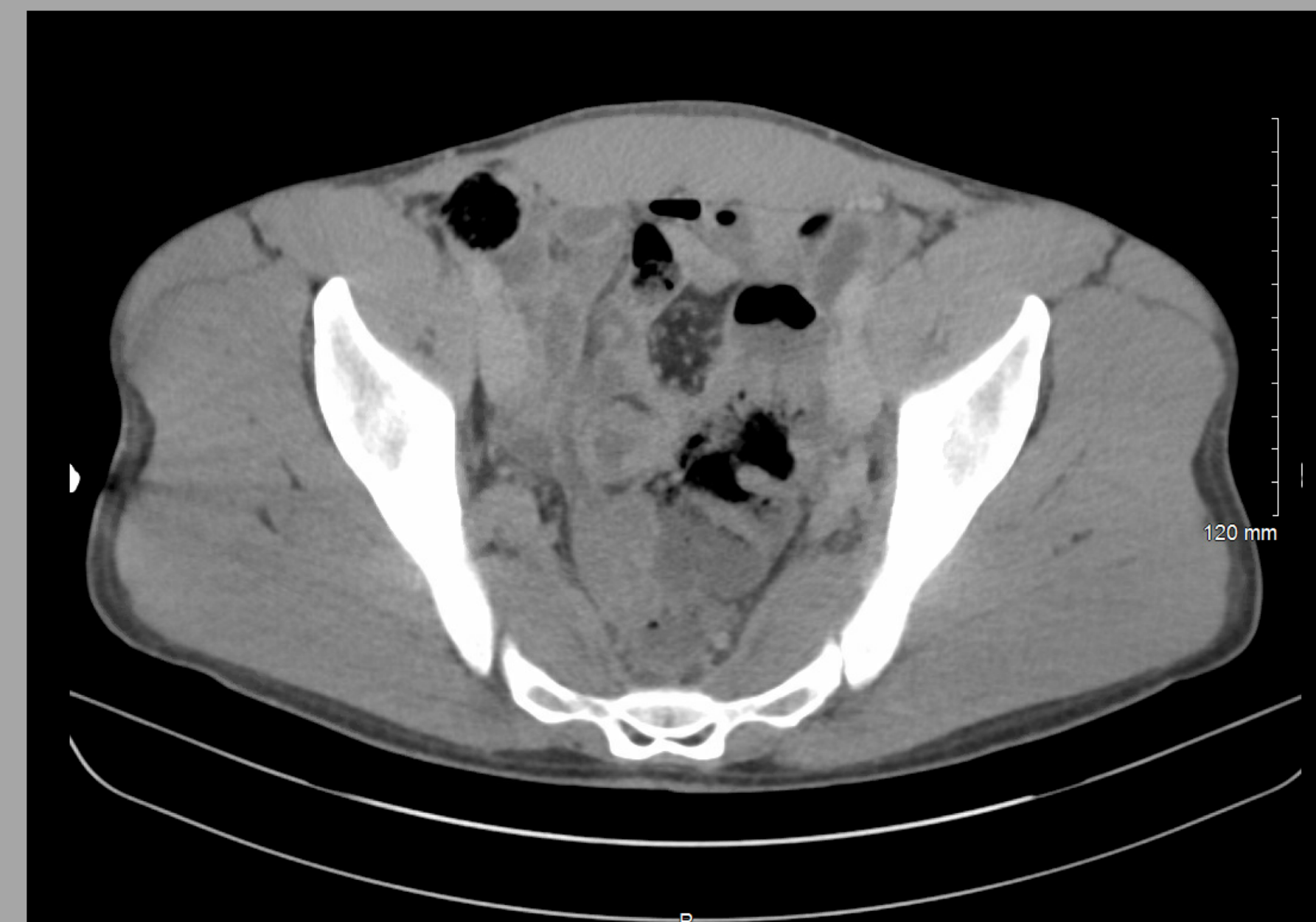


Figure C: Transverse slice of CT scan demonstrating location of ileosigmoid fistula

## Discussion

- Types of fistulas can be described by their location.
- Fistula formation can occur between two epithelized surfaces, including intestines, blood vessels, skin, and other hollow organs.
- Presenting symptoms of a fistula are dependent on the anatomical locations involved.
- The gold standard for fistula diagnosis is examination under anesthesia. However, the use of specific imaging modalities including MRI and ultrasound can be used in the assessment and evaluation of suspicious lesions.
- Treatment options can vary depending on the anatomical structures involved and complexity of fistula.
- Treatment can include medical therapy, surgical intervention, or a combination of both.
- Newer, experimental treatment modalities are under development and include medical glues, plugs, and direct stem cell injections.
- Close monitoring of fistulas is required to assess for treatment efficacy. This includes monitoring for recurrence of symptoms, new or worsening symptoms, and repeated imaging if deemed clinically necessary.

## Conclusion

The treatment for most severe fistulas require a combination of medical therapy and surgical resection. When patients are in remission from CD, the likelihood of developing fistulas is significantly decreased compared to those not in remission.

## References

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