

# A rare mimic of cecal neoplasia

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## Abstract

Appendiceal intussusception is a rare, but relevant differential diagnosis of colorectal neoplasia on endoscopy. Misdiagnosis as polyp and endoscopic removal may result in severe iatrogenic complications.

## KEYWORDS

appendiceal intussusception, colonoscopy, Colorectal neoplasia, gastroenterology, general surgery, polyp

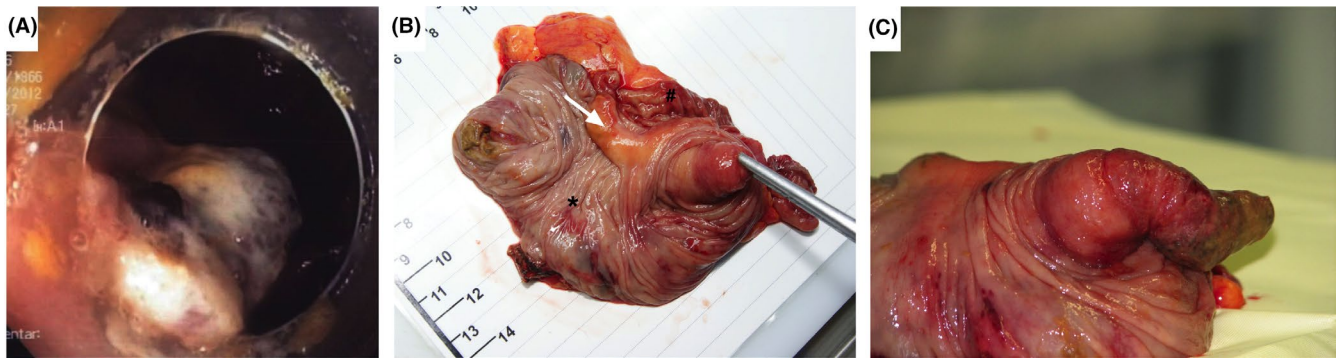
## 1 | CASE REPORT

Appendiceal intussusception is a rare condition of various etiology and may mimic colorectal neoplasia. Clinical awareness of this condition is important for proper therapeutic management and to avoid iatrogenic complications.

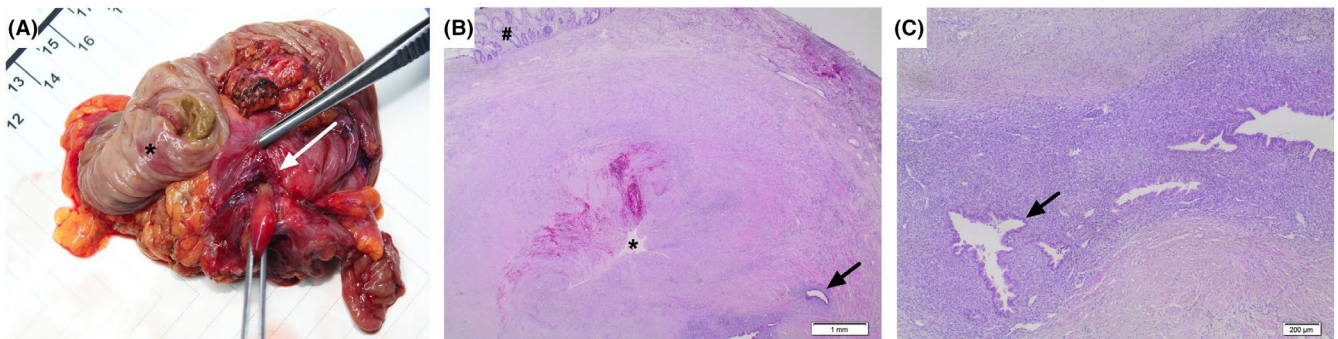
A 46-year-old female presented with dull right lower-quadrant pain for three weeks and tenderness at McBurney's point. Ultrasound revealed a hypoechoic mass protruding in the cecum, which was considered suspicious in subsequent colonoscopy, performed to rule out malignancy (Figure 1A). The patient underwent ileocecal resection. Gross pathological examination showed a polypoid structure with focal hemorrhage (Figure 1B and 1C). Integrating the clinical scenario and gross findings, what is the diagnosis and the most likely underlying condition?

The lesion unmasked as a complete intussusception of the appendix (Figure 2A). Histological evaluation confirmed the finding of an inverted appendix (Figure 2B) with associated ulcerative inflammation. Additionally, glandular structures (Figure 2B and 2C) embedded in an endometrial stroma were found within the appendiceal wall, consistent with appendiceal endometriosis. The patient was discharged in good health.

Appendiceal intussusception is a rare condition first described by McKidd *et al* in 1858.<sup>1</sup> Endometriosis represents the most common adult etiology. Clinical diagnosis is difficult, which is why in most cases appendiceal intussusception is diagnosed upon surgery.<sup>2</sup> Awareness of this condition is, however, crucial as endoscopic removal may result in severe iatrogenic complications, if misdiagnosed as colonic polyp.



**FIGURE 1** A: Endoscopic view of the lesion. B: Ileocecal resection specimen. Hashtag: Ileum; asterisk: cecum; arrow: ileocecal valve; tweezers: lesion. C: Close-up view of the lesion



**FIGURE 2** A: Ileocecal resection specimen with serosal view of the intussusception. The tweezers hold stretched, invaginated mesenteric tissue next to the original location of the appendix (arrow), which appears absent from this perspective. Also note that due to the serosal perspective neither the ileocecal valve nor ileal mucosa are visible on this image. asterisk: cecum. B: Histology of the inverted appendix (transverse section). Asterisk: serosa outside-in; hashtag: mucosa inside-out. H&E, 40× magnification. C: Histology showing appendiceal endometriosis with glandular structures (arrows) embedded in an endometrial stroma. H&E, 100× magnification

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## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this article.

## AUTHOR CONTRIBUTIONS

TA: involved in writing the case report and review of literature.  
MvF: involved in the patient's care and provided clinical details.  
BG: involved in writing the case report and review of literature.

## ETHICS APPROVAL

The use of tissue specimens was approved by the University's ethics committee (approval code 206/2015).

## DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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## REFERENCES

- Samuk I, Nica A, Lakovski Y, Freud E. Appendiceal Intussusception: A Diagnostic Challenge. *Eur J Pediatr Surg.* 2018;28(1):30-33.
- Sharma P, Hegde R, Kulkarni A, Soin P, Kochar P, Rotem E. Imaging right lower quadrant pain: Not always appendicitis. *Clin Imaging.* 2020;63:65-82.

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