From Twist to Tumor: Incidental presentation of mucinous adenocarcinoma as descending Colo-colic intussusception and successful management.

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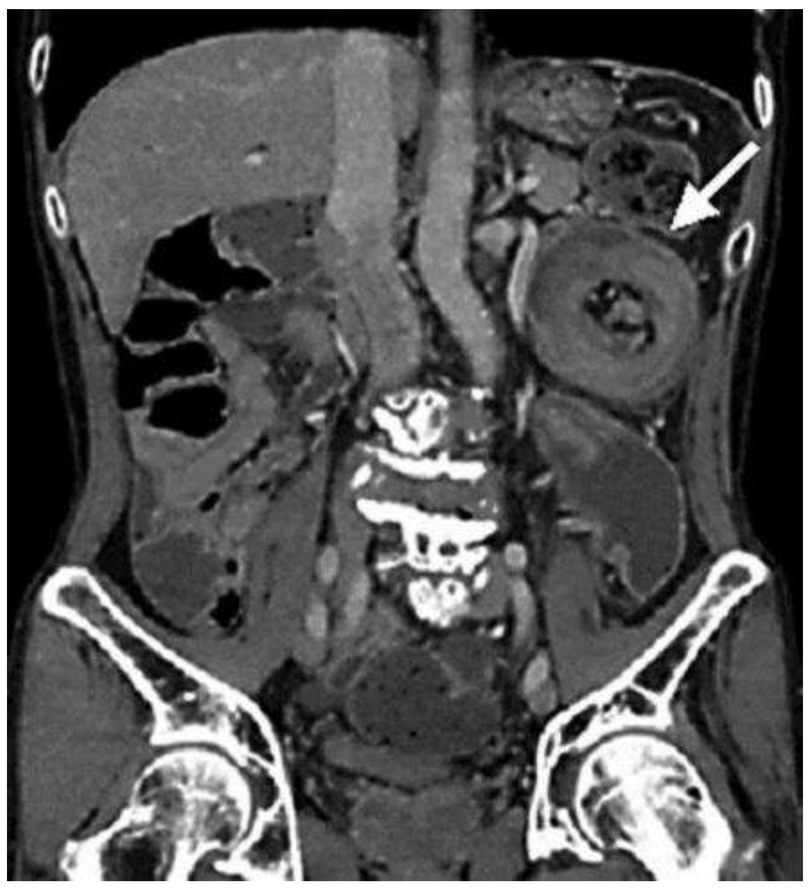
BACKGROUND

- Adult intussusception occurs in **only 1%** of bowel obstruction cases in adults, a rare and challenging to diagnose condition.
- Primary adenocarcinoma is the most frequent cause of adult intussusception, having rare prevalence with **signet ring cell** histopathology.

CASE DISCUSSION

- A 35-year-old male with no significant comorbidities presented to the emergency with acute severe abdominal pain, bilious non-bloody vomiting for one day, and absolute constipation with no flatus passed for two days. He also reported a one-month history of dull, generalized abdominal discomfort, intermittent fresh rectal bleeding in small amounts, and relative constipation. *There was no history of weight loss, altered bowel habits, inflammatory bowel disease, or family history of colorectal malignancy.*
- **On examination**, the patient was afebrile, normotensive, and tachycardic (110 bpm). Abdominal examination revealed mild distension, left lower quadrant tenderness, and a palpable, non-mobile, transversely placed mass.
- **Digital rectal examination** showed a ballooned rectum with blood staining.
- **Contrast-enhanced CT abdomen** confirmed a large segment of descending colonic intussusception with proximal bowel dilatation, suggesting obstruction.



CT scan view of descending colon intussusception, pointed arrow showing target sign.

TREATMENT

SURGICAL MANAGEMENT:

Emergency exploratory laparotomy revealed Colo-colic intussusception distal to the splenic flexure with a firm intraluminal mass. The involved omentum was reduced, and a left colectomy with end transverse colostomy and distal mucous fistula **(double barrel colostomy)** was performed, with 5 cm margins on either side. Recovery was uneventful, and the patient was discharged after five days.

HISTOPATHOLOGY:

Histopathology revealed a poorly differentiated mucinous adenocarcinoma with signet ring cells **(pT3N1aM0),** involving one of 17 lymph nodes.

- **CEA** < 0.5 ng/ml

ONCOLOGICAL MANAGEMENT:

Adjuvant chemotherapy with Oxaliplatin and Capecitabine was given, which was well tolerated.

FOLLOW UP

Post-treatment colonoscopy showed normal rectum and anus, with a sigmoid polyp; the descending colon and splenic flexure had been resected. Via per stoma colonoscopy, transverse and ascending colon were examined up to the cecum and found unremarkable.

As per oncology MDT guidance, the patient remained on surveillance with periodic imaging and tumor markers. As of the last follow-up in March 2025, making the total follow-up duration 14 months**,** he remained clinically well.

KEY TAKEAWAYS

- ✓Non-operative reduction in adults is often ineffective and carries risks such as tumor cell dissemination and intraluminal seeding, making resection the preferred approach.
- ✓A notable aspect of this case is the **patient's young age** and **absence of risk factors** at the time of colorectal adenocarcinoma diagnosis.
- ✓**Fewer than 3%** of colorectal cancer cases occur in **individuals under 50 without known risk factors** such as inflammatory bowel disease, hereditary polyposis syndromes, or a first-degree family history of colon cancer

CONCLUSION

This case highlights the importance of considering malignancy in adult intussusception and reinforces the value of prompt, multidisciplinary intervention for optimal outcomes.

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