A Grate Lesson:
Abdominal Pain Secondary to Ingested Wire Grill Brush

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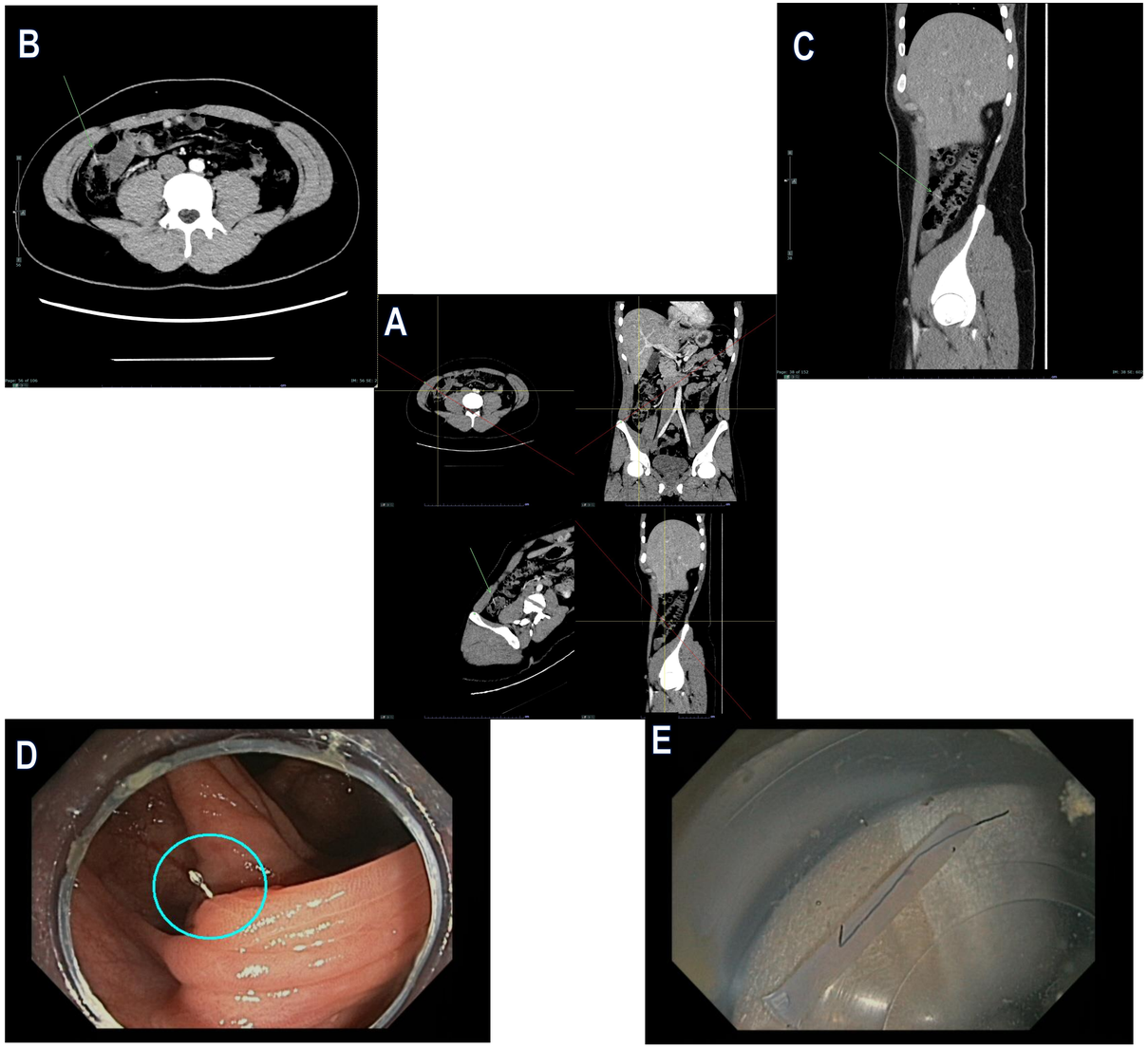
Background

- 18yo male complaining of intermittent abdominal pain and new onset of hematochezia. Despite initial negative CT, colonoscopy found a metal object protruding 1-2mm from the colonic mucosa.
- Our case describes our initial technique for extraction of a diminutive thin metallic object.
- We further discuss endoscopic quality indicators as defined by the ACG/ASGE 2006 Task Force.

Case Presentation

- An 18-year-old male presented with 3 days of right lower quadrant abdominal pain and
- 3 weeks of intermittent bright red blood per rectum.
- Pain was described as sharp 2/10 non-radiating pain at rest but 9/10 with movement.
- Review of systems was negative for diarrhea, constipation, nausea, emesis or any extra-intestinal symptoms.
- Patient denied any NSAID, alcohol or illicit drug use though did endorse a family history of Crohn's, Celiac disease and IBS in primary and secondary family members.
- Initial abdominal CT noted several **nonspecific enlarged fluid-filled loops** of small bowel within the right lower quadrant particularly at the terminal ileum.

Diagnostics



Imaging

(A) Retrospective analysis of initial abdominal CT in axial (B) and sagittal (C) planes localizing penetrating wire in the cecum.
(D) 1-2mm thin metallic object protruding from the cecal mucosa.
(E) Successful extraction of a 1.5cm metallic wire with a snare following failed attempts with forceps.

Findings and Discussion

- Upon evaluation with colonoscopy, a sharp metallic object was seen protruding about **1mm out of the cecal mucosa** near the ileocecal valve.
- After several unsuccessful attempts at removing the object with **biopsy forceps**, a **cold snare** was looped around the end, closed, and the object was extracted through the working channel.
- Inspection revealed a sharp thin **1.5cm** long metallic foreign body suspected to be a fragment of a wire brush used to clean barbeque grills.
- Retrospective analysis of CT imaging revealed the metallic object in question.
- Patient was symptom-free 4 days later with no recurrence of pain.
- While not specified in ACG Acute Lower GI Bleeding guidelines, QI during CRC screening do endorse “adequate” prep as the ability to visualize polyps >5mm.
- Given the small visible portion of the wire, the likelihood of missing the etiology on evaluation is high.
- While advanced imaging is beneficial, endoscopists must retain an high index of suspicion when performing diagnostic colonoscopies with special attention to diminutive abnormalities even in the setting of nonspecific or normal findings on CT.

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