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Clinical Image or Video

A Rare Case of Intussusception in an Elderly Adult Diagnosed by Point-of-Care Ultrasound

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This clinical image article depicts bowel intussusception secodary to colorectal adenocarcinoma.

PATIENT PRESENTATION

An 85-year-old female presented to our emergency department (ED) with two weeks of worsening constipation and intermittent severe periumbilical pain with emesis. Point-of-care ultrasound (POCUS) revealed a concentric ring with a hyperechoic center on cross-sectional view of the colon near the hepatic flexure (Figure 1) as well as an inverted segment of bowel on longitudinal view (Figure 2) concerning for colonic intussusception. This was confirmed with contrasted computed tomography (CT) imaging. Colonoscopy and biopsy of the area demonstrated adenocarcinoma. The patient underwent a left hemicolectomy. Her post-operative course was uncomplicated and she was discharged in a hemodynamically stable condition.

DIAGNOSIS: COLONIC INTUSSUSCEPTION SECONDARY TO COLORECTAL ADENOCARCINOMA

DISCUSSION

Although more commonly associated with children, intussusception is a rare but recognized pathology in adults, with a prevalence that increases with age.[1] In adults, most cases are associated with tumors or idiopathic and postoperative etiologies to a lesser degree.[1,2] Symptoms in adults include nausea, vomiting, and hematochezia, with the most common symptom being intermittent abdominal pain. Intussusception can easily be overlooked when considering the broad differential associated with these non-specific symptoms.[3] Missed diagnosis can lead to life-threatening complications, such as bowel obstruction with ischemia, sepsis, and perforation.[3]

CT imaging is the most frequent diagnostic modality for intussusception in adults.[1] However, POCUS has been shown to be helpful in the rapid diagnosis of intussusception, paralleling that of diagnosis in children, which em-

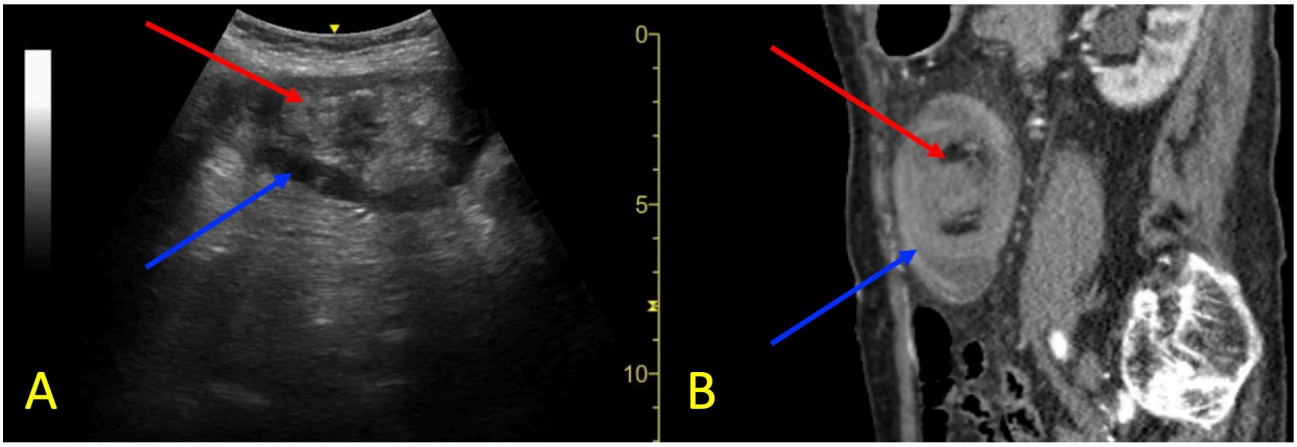

Figure 1. Cross-sectional point-of-care ultrasound (A) and computed tomography with contrast (B) images of the transverse colon near the hepatic flexure showing targetoid images of the invagination of the intussusceptum (red arrow) into the intussuscipiens (blue arrow) is visualized. Hypoechoic edema of the outer bowel loop (A, blue arrow) and hyperechoic, compressed telescoping bowel (A, red arrow) are noted.

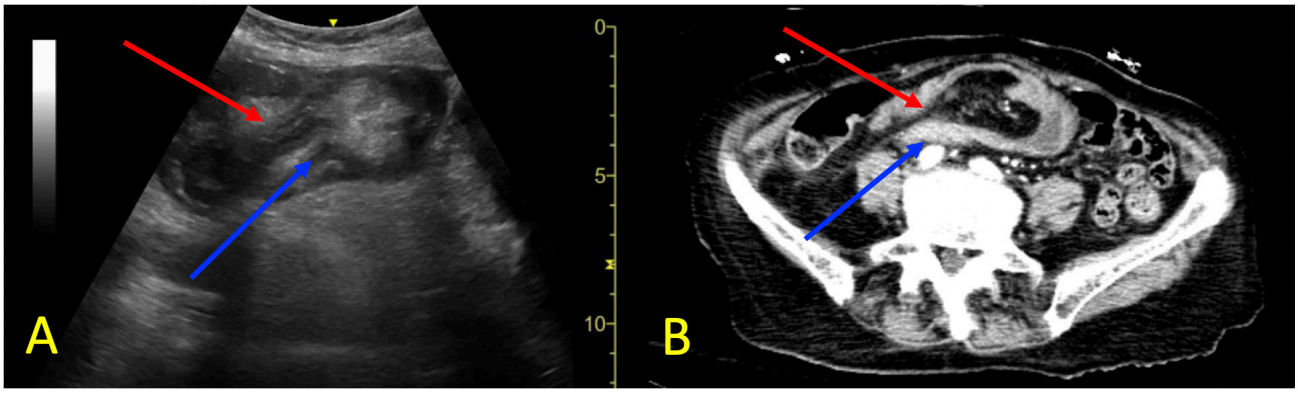

Figure 2. Longitudinal views of the transverse colon on point-of-care ultrasound (A) and computed tomography with contrast (B) images demonstrating a transition point with invagination. Invagination of the intussusceptum (red arrow) into the intussuscipiens (blue arrow) is visualized. Hypoechoic edema of the outer bowel loop (A, blue arrow) and hyperechoic, compressed telescoping bowel (A, red arrow) are noted.

phasizes the use of ultrasound.[4] Ultrasound can also predict severity and can notably avoid radiation exposure for younger populations.[5] Given the speed at which it can be obtained, ultrasound may facilitate earlier involvement of specialists, proving beneficial in resourced limited settings or busy facilities with high CT demand.[6]

ETHICAL CONSIDERATIONS

Written informed consent was obtained for the publication of these clinical images and accompan ying case details.

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