Endoscopic management of retained patency capsules

A 58-year-old woman presented to the emergency room with pain at her ileostomy site for the previous 5–6 hours. She had had a colonic resection for "ulcerative colitis" 15 years earlier. A computed tomography (CT) scan of the abdomen demonstrated a foreign body in the ileostomy opening with proximal small-bowel obstruction (Fig. 1). She had ingested a patency capsule earlier that day. The patency capsule can be seen (arrow) 3–5 cm proximal to the ileostomy opening and dilated proximal loops of bowel with air-fluid levels (arrowheads).

Ileoscopy showed a stricture in the distal ileum (arrowhead) (Fig. 2). An intact patency capsule (arrowhead) seen proximal to the ileal stricture (Fig. 3). Ileitis (arrowheads) seen proximal to the ileal stricture after removal of the patency capsule (Fig. 4).

Active inflammation with granulation tissue formation was noted up to 15–20 cm cephalad from the ileostomy opening (Fig. 4). Active inflammation with granulation tissue was seen in ileal biopsies suggesting an inflammatory stricture.

A 67-year-old man was undergoing outpatient work-up for iron deficiency anemia. Prior esophagastroduodenoscopy and colonoscopy findings were unremarkable. He reported chronic ibuprofen use for musculoskeletal pain. A patency capsule was administered before capsule enteroscopy because of a history of partial small-bowel obstruction 2 weeks earlier. The capsule was seen in the right lower quadrant on X-ray 2 days later. The patient was completely asymptomatic. A device-assisted enteroscopy performed 2 weeks later for his iron deficiency anemia showed unremarkable findings up to 18 cm distal from the ileum. A device-assisted upper double-balloon enteroscopy 4 weeks later showed an intact patency capsule proximal to a 2-cm, cratered ulcer in the distal ileum with stricture formation. The stricture was dilated with 8–12-Fr through-the-scope balloons. The patency capsule passed through the dilated stricture. The stricture biopsy showed acute on chronic inflammation with granulation tissue formation. The iron deficiency anemia and stricture were attributed to chronic non-steroidal anti-inflammatory drug use.

In conclusion, patency capsules may be retained in patients with unknown strictures. Prompt endoscopic intervention in symptomatic patients may avoid surgical intervention.

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Competing interests: None

Shashank Garg1, Rohit Anand1, Ethan Dubin2, Sergey Kantsevoy3, Sudhir Dutta2,4

1 Johns Hopkins University-Sinai Hospital Program in Internal Medicine, Department of Medicine, Sinai Hospital, Baltimore, Maryland, USA
2 Division of Gastroenterology, Department of Medicine, Sinai Hospital, Baltimore, Maryland, USA

Fig. 1 Computed tomography (CT) scan of the abdomen of a 58-year-old woman with pain at her ileostomy site for the previous 5–6 hours. She had ingested a patency capsule earlier that day. The patency capsule can be seen (arrow) 3–5 cm proximal to the ileostomy opening and dilated proximal loops of bowel with air-fluid levels (arrowheads).

Fig. 2 Ileoscopy showing a stricture in the distal ileum (arrowhead).

Fig. 3 Intact patency capsule (arrowhead) seen proximal to the ileal stricture.

Fig. 4 Ileitis (arrowheads) seen proximal to the ileal stricture after removal of the patency capsule.