

Ileus related to wireless capsule retention in suspected Crohn's disease: emergency surgery obviated by early pharmacological treatment



Fig. 1 Upright plain abdominal film approximately 16 hours after capsule ingestion showing multiple air-fluid levels, dilated small bowel loops, and the capsule lying centrally in the abdomen.

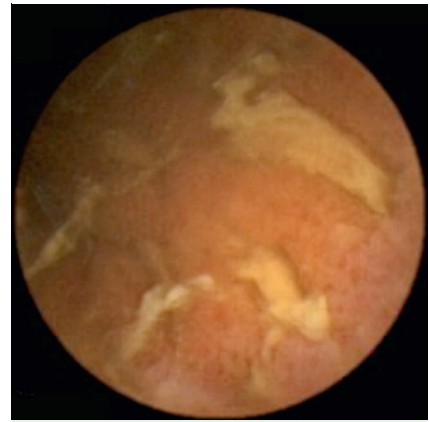


Fig. 2 Wireless capsule image made 3 hours 7 minutes after capsule ingestion: ulcerations and erythema are noticed for the first time.

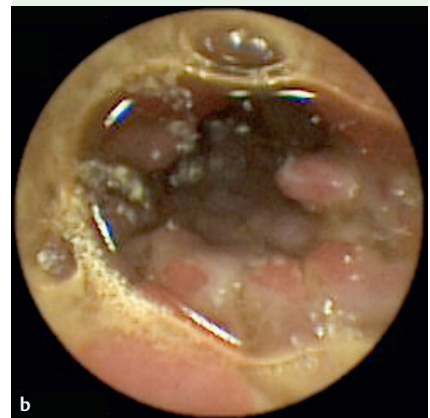
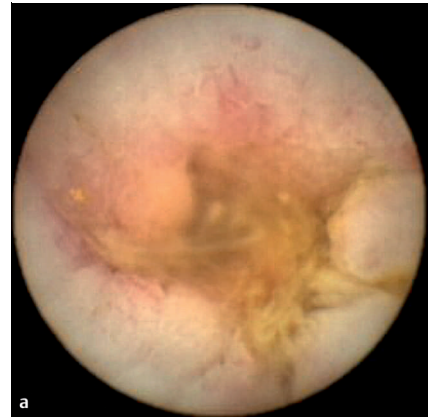


Fig. 3 a, b Wireless capsule images made 6 hours 40 minutes and 6 hours 49 minutes after capsule ingestion, showing a narrowed small-bowel segment with swelling, ulceration, and pseudopolyps. The capsule seems to be tumbling backward and forward in the same severely diseased and narrowed bowel segment in the distal jejunum. The locating software suggested the location of the stenosing segment in the distal jejunum.

A previously healthy 21-year-old woman without a history suggesting stenosis and normal ileocolonoscopy findings underwent wireless capsule endoscopy (PillCam SB 11 × 26 mm; Given Imaging, Yoqneam, Israel) for suspected Crohn's disease of the small bowel. Approximately 16 hours after capsule intake, she developed small-bowel ileus (● Fig. 1). The capsule recording showed skip lesions of inflamed small bowel with ulcerations, swelling, pseudopolyps, and stenosis (● Fig. 2). After 6.5 hours, capsule progression was halted by a strictured small-bowel segment with severely active disease (● Fig. 3). A diagnosis of severe stenosing Crohn's disease of the small bowel with subsequent capsule retention leading to obstruction of the small bowel was made.

After consultation with the surgeons it was decided to try to induce reduction of the swelling and stenosis medically. Three hours after onset of symptoms, 200 mg hydrocortisone and 300 mg infliximab were administered. Six hours later the patient felt much better. A new abdominal

exam indicated that the capsule had progressed into the sigmoid colon (● Fig. 4). Capsule endoscopy has rapidly become the procedure of choice for evaluation of suspected small-bowel Crohn's disease because of its safety and high diagnostic yield, in particular when ileocolonoscopy is negative [1]. Capsule retention proximal to a stenosis is the most important complication but is rare [2,3]. Treatment usually consists of endoscopic or surgical intervention with simultaneous treatment of the stenosis. If a stenosis is suspected, small-bowel radiography has to be done first [3,4]. Alternatively, the "patency" capsule may be used, but reports on its efficacy are equivocal [5].

We conclude that immediate treatment with immunosuppressive medication to reduce swelling and stenosis should be considered in acute cases of capsule retention if a diagnosis of Crohn's disease can be established on the basis of the images made by the obstructing capsule. In this way surgery can be avoided or at least postponed, and at the same time treatment of the underlying disease is initiated.

Endoscopy_UCTN_Code_CPL_1AI_2AB

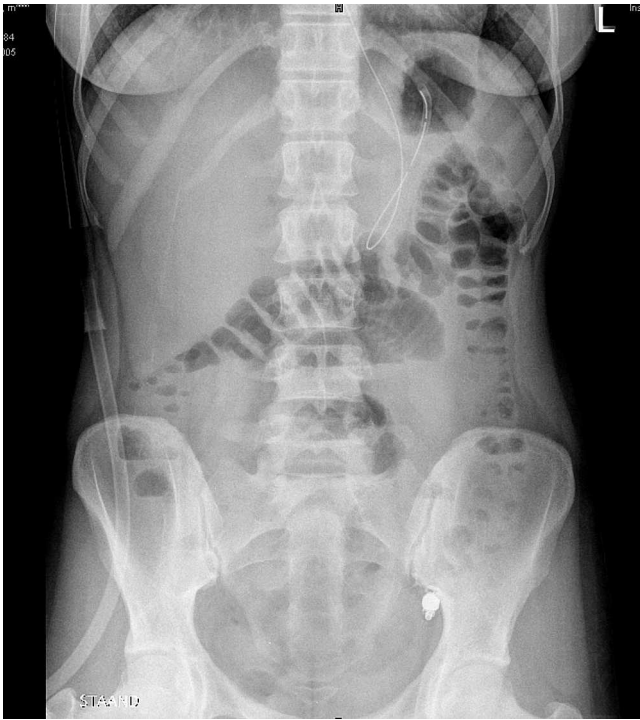


Fig. 4 Upright plain abdominal film showing wireless capsule in the sigmoid.

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Bibliography

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