Video capsule endoscopy in familial adenomatous polyposis: capsule entrapment in an anal stenosis



Fig. 1 A 44-year-old woman, who had undergone proctocolectomy with ileoanal pouch anastomosis 13 years earlier to treat colon carcinoma, underwent endoscopy, which showed stenosis of the ileoanal anastomosis 1 day before video capsule endoscopy (VCE).

A 44-year-old woman with familial adenomatous polyposis syndrome underwent video capsule endoscopy (VCE) (Pillcam SB2, 11.0 mm diameter; Given, Yoqneam, Israel) for suspected small-bowel adenomas. She had undergone proctocolectomy with ileoanal pouch anastomosis 13 years earlier to treat colon carcinoma. During the day of the VCE exam, endoscopy of the ileoanal pouch was performed showing a stenosis of the anal canal

(Fig. 1). Symptoms of this stricture had not been reported by the patient. A digital rectal exam was impossible as a result of the stenosis: however, the stricture could be passed with an endoscope of 9.8 mm diameter (Olympus GIF-H180). The pouch and neoterminal ileum showed no further abnormalities. Approximately 36 hours after administration of the video capsule, the patient developed abdominal pain. An abdominal computed tomography (CT) scan showed mechanical bowel obstruction as a result of capsule entrapment in the anal stenosis (Fig. 2a, b). In a subsequent lower endoscopy, the retained capsule was recovered with a net retriever (> Fig. 3), and the patient's obstructive symptoms resolved after the capsule's salvage. At 16-month follow-up, the patient remained asymptomatic from the anal stenosis.

VCE examination of the small bowel is indicated in patients with familial adenomatous polyposis with duodenal polyps [1]. The rate of capsule retention during VCE varies in the literature with a mean retention rate of 1.4% [2]. However, this event rarely leads to symptoms of bowel obstruction [2,3]. To the best of our knowledge, obstruction owing to capsule entrapment in an anal stenosis has not

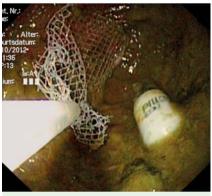


Fig. 3 In a subsequent lower endoscopy, the impacted video capsule was recovered from the ileoanal pouch using a net retriever.

been reported. Furthermore, the retention could not have been anticipated in the light of the endoscopic passage of the anal stenosis on the same day as the capsule application [4]. Since VCE is recommended in patients with familial adenomatous polyposis to screen for small-bowel adenomas [5], capsule entrapment by anal stenosis, which is common after ileoanal pouch operation, needs to be considered in this patient group.

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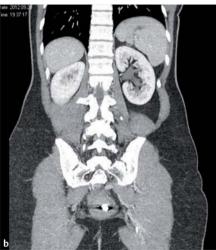


Fig. 2 Following video capsule endoscopy (VCE), the patient developed abdominal pain. **a** Transverse section abdominal computed tomography (CT) scan illustrating extensive small-bowel dilatation consistent with mechanical bowel obstruction. **b** Transverse section abdominal CT scan demonstrating the video capsule obstruction in the ileoanal stenosis.

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