

Intestinal Perforation Due to Retained Wireless Capsule Endoscope

To date, there have been no documented cases of intestinal perforation occurring as a result of long-term retention of a wireless capsule endoscope in the absence of intestinal strictures.

An 80-year-old patient with a history of cholecystectomy 10 years previously was admitted because of anemia (hemoglobin 9.7 g/dl, MCV 78 fl). Gastroscopy, colonoscopy and small-bowel transit studies were all normal. Selective arteriography of the celiac trunk and mesenteric arteries was also normal. Wireless capsule endoscopy revealed multiple angiodysplastic lesions in the distal jejunum and proximal ileum. After 1 month the patient had not eliminated the capsule but did not have any symptoms or signs of intestinal obstruction. Two months later, however, the patient presented with peritonitis and was found to have diffuse peritonitis secondary to perforation of the distal ileum. The capsule was found in the area of the perforated ileum (Figure 1) and an ileal segment was removed. A large number of adhesions were also observed, which were probably secondary to the previous surgery. The patient was discharged.

The capsule endoscope is retained in the small bowel in fewer than 2% of cases [1–3]. Occasionally, the capsule eventually moves on and will be eliminated naturally; in other cases, if a stricture is detected, surgery will be necessary. No case of intestinal perforation has yet been reported, not even in patients with small-bowel strictures [4,5]. It is possible that the presence of multiple adhesions in the abdominal cavity in this patient might have led to difficulty in intestinal transit of the capsule, which failed to progress and caused a perforation.

We believe that previous surgery should not be considered to be an absolute contraindication to the use of the capsule endoscope, and not even a relative contraindication in the light of the exceptional nature of the complication we have described. However, surgical treatment to

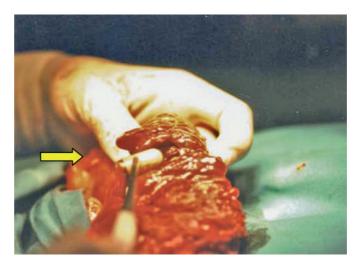


Figure 1 The capsule endoscope (arrow) was found in the region of the perforated distal ileum.

recover the device should probably not be delayed in patients with a history of previous surgery who fail to excrete the capsule naturally within a reasonable time.

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