

## Spontaneous resolution of capsule endoscope retention in a normal small bowel after 2.5 years



**Fig. 1** Video capsule endoscopy showing normal small-bowel mucosa at the site of capsule retention.

Capsule retention, defined as retention of a capsule endoscope in the digestive tract for a minimum of 2 weeks, is a major concern in patients undergoing video capsule endoscopy [1]. We report the first case of retention of a video capsule in the small bowel due to no apparent cause, which resolved spontaneously 2.5 years later without major consequences.

A 74-year-old woman with history of hysterectomy and pelvis irradiation presented with recurrent iron deficiency anemia. Abdomen plain film, gastroscopy, colonoscopy, and abdomen computed tomography (CT) scan showed no pathology. After 2 days of ingestion of a patency capsule that freely passed through the small and the large bowels in 30 hours, the patient underwent video capsule endoscopy (M2A capsule, Given Imaging, Yokneam, Israel). Examination revealed a stagnant capsule in the small bowel, with no mucosal abnormality (▶ Fig. 1).

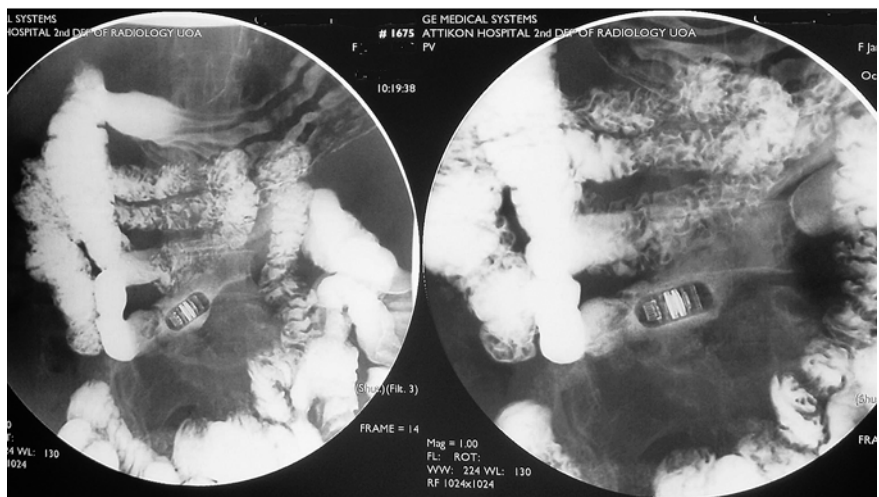
Capsule retention was confirmed by plain abdominal radiography (▶ Fig. 2) at 48 hours and at 18 days after ingestion of the capsule.

A barium follow-through did not reveal any pathology (▶ Fig. 3) apart from the retained capsule.

The patient was asymptomatic and discharged with instructions to undergo an abdominal plain radiographic examination every 3 months. At 1 year, the patient had intestinal obstruction. A computed tomography (CT) scan and plain abdomi-



**Fig. 2** Plain abdominal radiograph showing the retained capsule but no findings indicative of obstruction.



**Fig. 3** Small-bowel follow-through showing the retained capsule but no other small-bowel pathology.

nal radiograph confirmed ileus and the presence of the capsule in the small bowel. However, the patient's symptoms resolved within 3 days. She continued to undergo regular radiology examinations, and 2.5 years after ingestion of the capsule, passage of the capsule was noted.

In conclusion, capsule retention in the small bowel may occur in the absence of an apparent cause. No investigation, even the use of the patency capsule [2], can replace clinical judgment to prevent retention of the capsule [3]. However, the course of capsule retention is usually be-

nign and the absence of strictures, or at least the presence of a patent small-bowel lumen [4], may be predictive of spontaneous egestion of the retained capsule.

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**K. Triantafyllou<sup>1</sup>, T. Kalli<sup>1</sup>, N. G. Danias<sup>2</sup>**

<sup>1</sup> Hepatogastroenterology Unit, 2nd Department of Internal Medicine – Propaedeutic, “Attikon” University General Hospital, Medical School, Athens University, Athens, Greece

<sup>2</sup> 4th Department of Surgery, Attikon University General Hospital, Medical School, Athens University, Athens, Greece

## References

- 1 *Karagiannis S, Faiss S, Mavrogiannis C.* Capsule retention: a feared complication of wireless capsule endoscopy. *Scand J Gastroenterol* 2009; 44: 1158 – 1165
- 2 *Delvaux M, Ben Soussan E, Laurent V et al.* Clinical evaluation of the M2A patency capsule system before a capsule endoscopy procedure in patients with suspected intestinal stenosis. *Endoscopy* 2005; 37: 801 – 807
- 3 *Lewis B.* How to prevent endoscopic capsule retention. *Endoscopy* 2005; 37: 852 – 853
- 4 *Cheon JH, Kim YS, Lee IS et al.* Can we predict spontaneous capsule passage after retention? A nationwide study to evaluate the incidence and clinical outcomes of capsule retention. *Endoscopy* 2007; 39: 1046 – 1052

## Bibliography

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## Corresponding author

**Dr. K. Triantafyllou**

Hepatogastroenterology Unit  
2nd Department of Internal Medicine – Propaedeutic  
“Attikon” University General Hospital  
Rimini 1  
12464 Haidari  
Greece  
Fax: +302-105-326422  
ktriant@med.uoa.gr