# Capsule retention in a Zenker's diverticulum



**Fig. 1** Contrast swallow, showing the capsule in a Zenker's diverticulum.

A 71-year-old man was admitted for capsule endoscopy because of overt gastrointestinal bleeding. Previous gastroscopy and colonoscopy were normal.

Capsule endoscopy was performed with an M2A capsule (Given Imaging Ltd., Yoqneam, Israel). The recorded video showed undigested food; however, no small bowel mucosa was visible, therefore capsule retention in the esophagus was suspected. Contrast swallow was performed, which showed the capsule in a 9-cm Zenker's diverticulum (**Fig. 1**), unknown until that point. When interviewed, the patient said he had not experienced any symptoms of esophageal disease, such as dysphagia or regurgitation of food.

Due to the size of the diverticulum, spontaneous expulsion of the capsule was improbable, so we decided to remove it. At gastroscopy, the endoscope easily entered the esophagus. Careful examination was



**Fig. 2** Endoscopic image of the capsule inside the diverticulum.

needed to find the entrance to the diverticulum. Inside the diverticulum, the capsule was found (**Fig. 2**) and extracted using a Roth net. A new capsule was delivered to the duodenum endoscopically.

Retention of the capsule is a rare complication in capsule endoscopy (reported in 1–2% of capsule endoscopies). The risk of capsule retention is higher in Crohn's disease or suspected stenosis of the small bowel (5–21% of patients) [1,2]. There are case reports of capsule retention in diverticula of the small bowel [3]. Capsule retention in an esophageal diverticulum is very rare during capsule endoscopy, and there are only a few case reports of capsule retention in a Zenker's diverticulum [4,5]. In all reported cases, endoscopic removal was possible.

We suggest that, in patients with known esophageal diverticula, primary endoscopic placement of the video capsule should be performed.

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