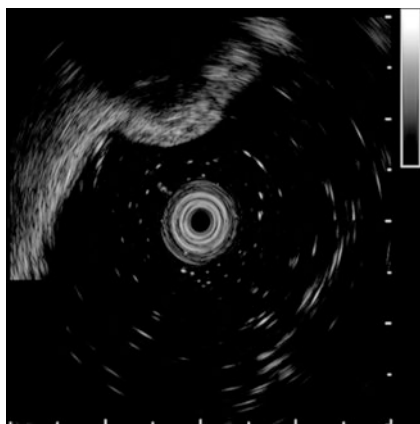
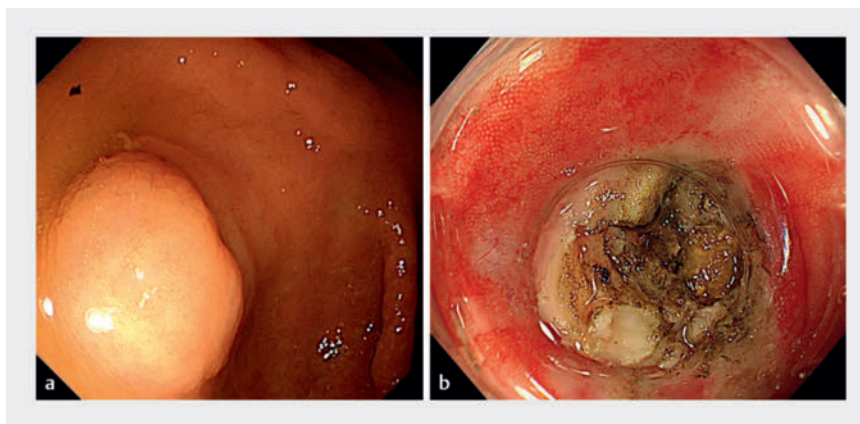


Successful appendiceal incision by endoscopic submucosal dissection to allow endoscopic removal of an encapsulated fecalith

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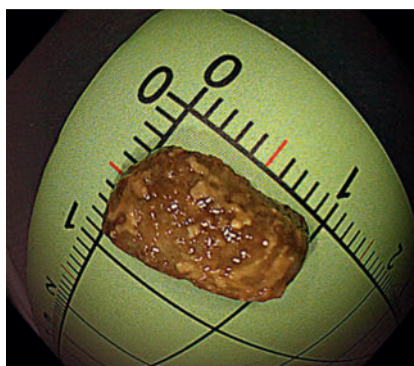


► **Fig. 1** Ultrasonographic image showing the encapsulated fecalith between the submucosa and muscularis propria.



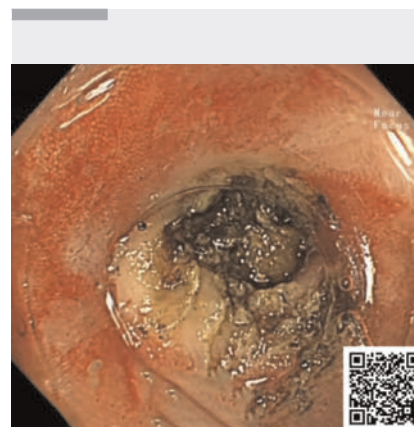
► **Fig. 2** Endoscopic images showing: **a** the lump (about 0.8 cm); **b** the view following incision of the mucosa, submucosa, and the scar.

A 53-year-old man was admitted to our gastroenterology department for investigation of a colonic lump. Ultrasonic colonoscopy revealed a lump (about 0.8 cm) blocking the opening of the appendix and an encapsulated fecalith between the submucosa and the muscularis propria (► **Fig. 1** and ► **Fig. 2a**). Removal of the encapsulated fecalith was difficult using only an endoscope. Therefore, the mucosa and submucosa were incised in the middle of the lump via endoscopic submucosal dissection (ESD); however, a scar was detected during the mucosal and submucosal incision (► **Video 1**). The scar was incised with a DualKnife, subsequently revealing a hard yellow encapsulated fecalith (► **Fig. 2b**). The lump had originated from inflammatory hyperplasia caused by the encapsulated fecalith. The encapsulated fecalith (about 1×1 cm) was removed using an endoscope (► **Fig. 3**). Some bleeding at the incision site was detected endoscopically, and hemostatic clips were applied to stop this. Appendicography showed no residual encapsulated fecalith. The patient experienced slight abdominal distension at the end of the therapeutic endoscopy. He was discharged from the hospital 5 days later with no symptoms.



► **Fig. 3** Photograph of the encapsulated fecalith (about 1 × 1 cm) after its removal.

A lump blocking the appendix, which can be detected by imaging, suggests the presence of a fecalith. The lump should be carefully identified, and cutting of the lump should be carefully avoided. Fecaliths cause appendicitis by closing the appendiceal cavity [1,2]. The presence of an appendicolith is also an independent risk factor for appendiceal perforation and gangrene [3]. Incision of the appendix via ESD exposes the fecalith and facilitates its removal. ESD is a new and feasible treatment for more complicated cases of encapsulated fecalith, such as those associated with inflammatory hyperplasia.



► **Video 1** The lump at the opening of the appendix was incised via endoscopic submucosal dissection allowing the encapsulated fecalith to be easily removed endoscopically.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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References

- [1] Bhangu A, Søreide K, Di Saverio S et al. Acute appendicitis: modern understanding of pathogenesis, diagnosis, and management. *Lancet* 2015; 386: 1278–1287. doi:10.1016/S0140-6736(15)00275-5
- [2] D'Souza N, Nugent K. Appendicitis. *Am Fam Physician* 2016; 93: 142–143
- [3] Podda M, Di Saverio S, Agresta F et al. Endoscopic retrograde appendicitis therapy: the true proof of the pudding is in the eating. *Gastrointest Endosc* 2020; 92: 1278–1279. doi:10.1016/j.gie.2020.07.01633237004

Bibliography

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CORRECTION

Correction: Successful appendiceal incision by endoscopic submucosal dissection to allow endoscopic removal of an encapsulated fecalith

Qingyu Zeng, Zhang Tao, Jie Liu et al. Successful appendiceal incision by endoscopic submucosal dissection to allow endoscopic removal of an encapsulated fecalith.

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In the above-mentioned article the institution affiliation 1 has been corrected. Correct is: Department of Gastroenterology, The Affiliated Hospital, Southwest Medical University, Luzhou, China. This was corrected in the online version on November 11, 2024.