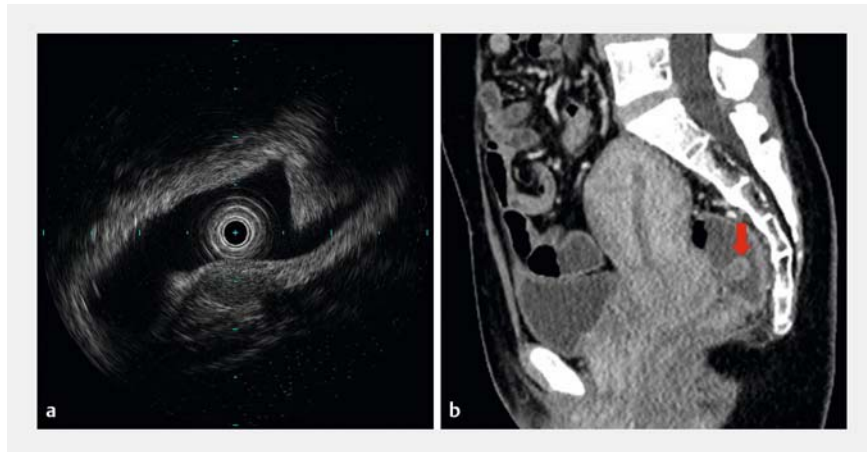


Efficacious resolution of a rectal subepithelial cold abscess via endoscopic submucosal excavation



A 39-year-old woman underwent a colonoscopy subsequent to episodes of hematochezia, and this revealed the existence of a rectal subepithelial mass, approximately 18×8 mm in size, covered with smooth, normal mucosa. Endoscopic ultrasound suggested that the lesion originated from the submucosal layer, locally infringing upon the muscularis propria, and that it showed homogeneous hypoechoic changes, clear boundaries, and was growing toward the lumen (► **Fig. 1 a**). Computed tomography revealed a roundish elevated lesion with an envelope in the rectum, which exhibited significant enhancement of the envelope following contrast administration, but showed no evidence indicating lymphatic or organ metastasis (► **Fig. 1 b**). The patient was hospitalized and underwent endoscopic excision of the lesion (► **Video 1**). During the procedure, the lesion was found to be a tough mass, mostly located in the submucosal layer, and when submucosal dissection was performed, the underside of the mass was seen to intrude into the muscularis propria in a strip-like manner. Consequently, the myofibers adjacent to the mass were excised, revealing the root of the mass, which was completely dissected. The procedure was completed without any perforation of the wound, and closure was achieved employing nylon suture and metallic clips (► **Fig. 2**). Post-operative antibiotics were administered to prevent infection, and the patient remained free of symptoms such as fever, abdominal pain, or hematochezia. Histopathologic study confirmed a deep encapsulated pyogenic inflammation, characterized by an accumulation of neutrophils, lymphocytes, plasma cells, and histiocytes forming an abscess (► **Fig. 3**). Redness, swelling, warmth, pain, and impaired function are the typical manifestations of acute inflammation [1,2]. An abscess without these acute inflammatory hallmarks is designated a cold ab-



► **Fig. 1 a** Endoscopic ultrasound suggested that the lesion originated from the submucosal layer, and that it locally involved the muscularis propria. **b** Enhanced computed tomography suggested enhancement of the subepithelial mass envelope.



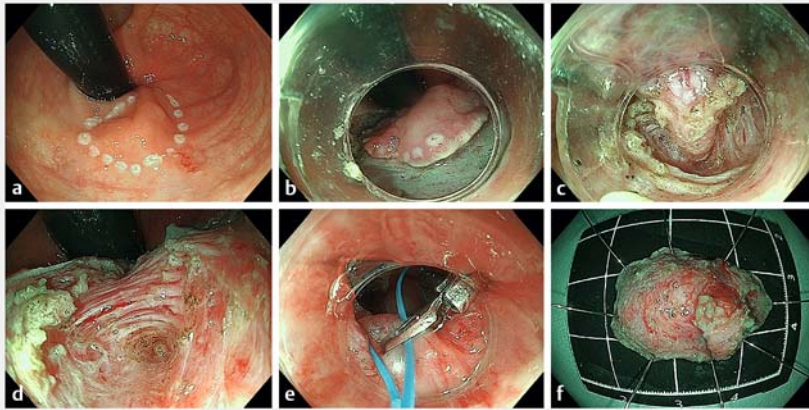
► **Video 1** Endoscopic submucosal excavation in the management of a rectal subepithelial cold abscess.

scuss [3–5]. Cold abscesses within the digestive tract are exceedingly rare. To the best of our knowledge, this represents the first reported instance of a rectal cold abscess mimicking a subepithelial mass, which was effectively managed through endoscopic submucosal excavation.

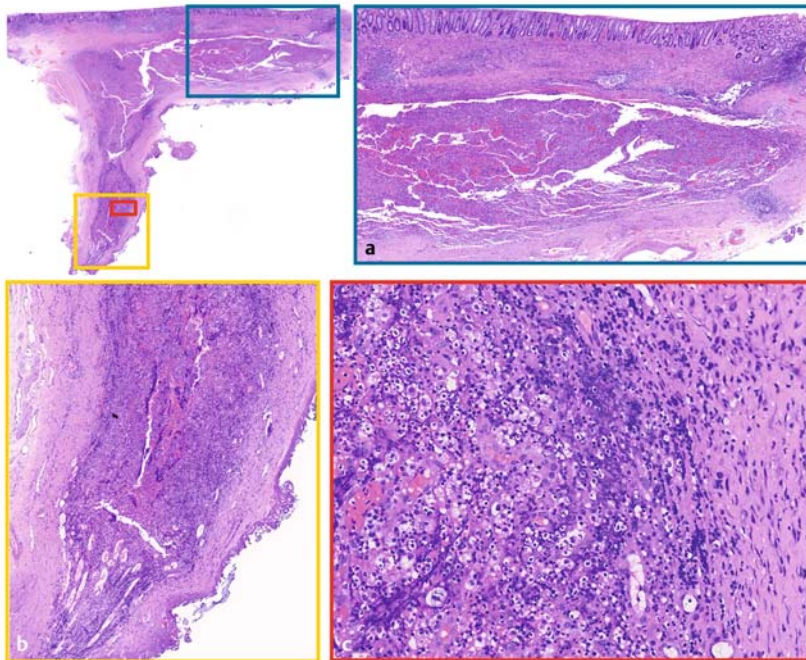
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Competing interests

The authors declare that they have no conflict of interest.



► **Fig. 2** Endoscopic submucosal excavation: operating procedure. **a** Circumferential marking. **b** Mucosal incision. **c** Dissection along the envelope. **d** Wound after lesion excision. **e** Closure of the wound. **f** Excised mass.



► **Fig. 3** Histopathology. **a, b** The lesion was a deep encapsulated pyogenic inflammation. **c** Accumulation of neutrophils, lymphocytes, plasma cells, and histiocytes forming an abscess.

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