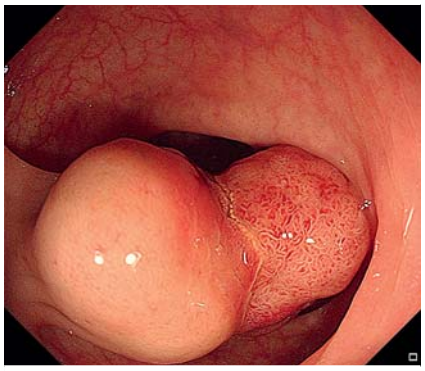
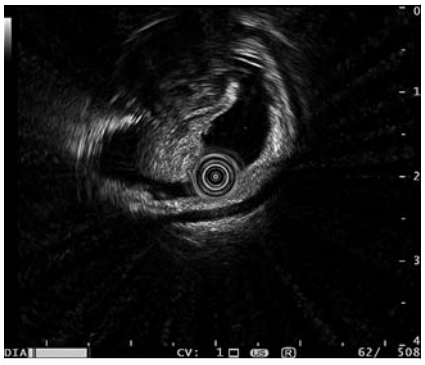
A rare colonic neoplasm with submucosal bulge successfully treated by endoscopic submucosal dissection

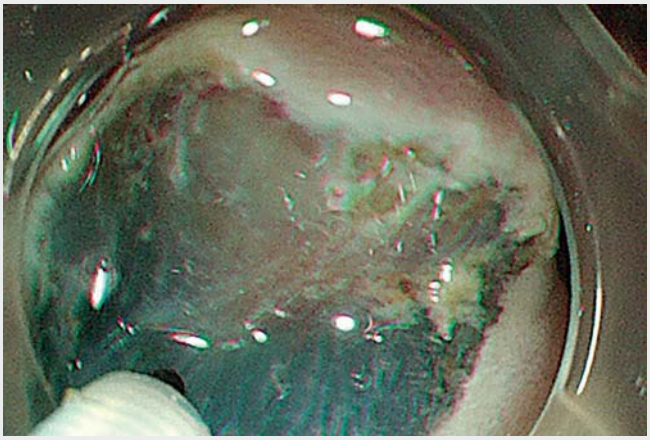


▶ **Fig. 1** Endoscopic view of the neoplasm in the sigmoid colon.



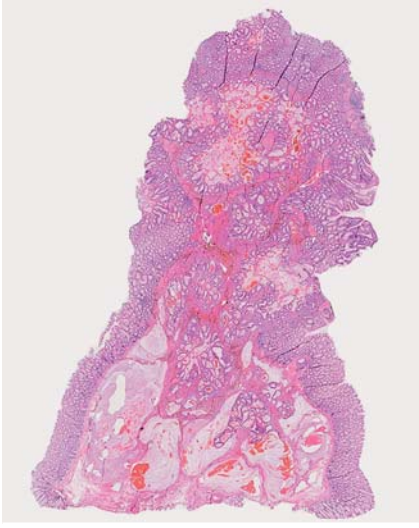
▶ **Fig. 2** Endoscopic ultrasound displaying hyperechoic head from the first layer and predominantly hypoechoic bulge from the third layer.

▶ **Fig. 3** The resected specimen of the neoplasm.

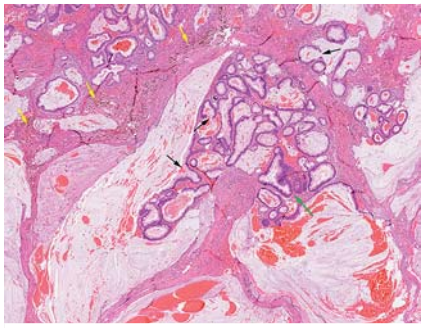


Video 1 The procedures of endoscopic submucosal dissection of a colonic neoplasm.

A 47-year-old man presented to the endoscopy center for health screening. Colonoscopy revealed a mucosal neoplasm of about 2.0×2.0 cm in the sigmoid colon with a large submucosal bulge (▶ **Fig. 1**). Endoscopic ultrasound showed the head of the hyperechoic structure from the first layer and the bulge predominantly hypoechoic from the third layer (▶ **Fig. 2**). Contrast-enhanced computed tomography (CT) revealed no evidence of lymph nodes or any metastasis. Endoscopic submucosal dissection (ESD) was performed (▶ **Video 1**). The lesion was successfully resected en bloc (▶ **Fig. 3**). Histopathology revealed a tubular adenoma in the upper mucosa and acellular mucin pools separated by irregular fibrous septa in the stalk (▶ **Fig. 4**). Displaced adenomatous glands are seen in the stalk (▶ **Fig. 5**, green arrow), surrounded by a rim of normal lamina propria with abundant hemosiderin (▶ **Fig. 5**, yellow arrow). The dissecting mucin encircled these glands with no epithelial fragments floating therein. A diagnosis of tubular adenoma with pseudoinvasion and dissecting mucin (stromal mucin pools) was made.



▶ **Fig. 4** Histopathology of the neoplasm showing tubular adenoma in the upper mucosa and acellular mucin pools separated by irregular fibrous septa in the stalk.



▶ **Fig. 5** Magnified view of field showing displaced adenomatous glands in the stalk (green arrow), some of which were ruptured (black arrow), and the surrounding normal lamina propria with abundant hemosiderin (yellow arrow).

Mucin dissecting stroma usually suggests the presence of an invasive mucinous carcinoma. Adenoma pseudoinvasion represents a very rare condition associated with dissecting mucin [1]. Torsion, ischemia, or prior biopsy may all displace glands into the submucosa of the stalk. These glands may become dilated with mucin, even rupturing into the stalk (▶ **Fig. 5**, black arrow). Distinguishing adenoma pseudoinvasion from invasive mucinous carcinoma is usually challenging. In pseudoinvasion, the displaced glands are cytologically similar to the overlying adenoma, often admixed with nonadenomatous glands, and are surrounded by normal lamina propria in which hemosiderin is frequently prominent. Furthermore, the adenomatous epithelium typically remains at the periphery of the mucinous pool instead of floating within it. These features are in contrast to those of invasive mucinous carcinoma [2]. An accurate diagnosis is crucial to avoid unnecessary surgery or chemoradiotherapy. ESD could provide curative resection in such cases.

Endoscopy_UCTN_Code_CCL_1AD_2AB

Competing interests

The authors declare that they have no conflict of interest.

The authors

Jun Li, Feng Liu
Digestive Endoscopy Center, Shanghai Tenth People's Hospital, Tongji University School of Medicine, Shanghai, China

Corresponding author

Feng Liu, MD
Digestive Endoscopy Center, Shanghai Tenth People's Hospital, Tongji University School of Medicine, 301 Mid Yanchang Road, Shanghai, 200072, China
drliuffeng@hotmail.com

References

[1] Byun T, Han D, Ahn S et al. Pseudoinvasion in an adenomatous polyp of the colon mimicking invasive colon cancer. Gut Liver 2009; 3: 130–133
[2] Molavi D, Argani P. Distinguishing benign dissecting mucin (stromal mucin pools) from invasive mucinous carcinoma. Adv Anat Pathol 2008; 15: 1–17

Bibliography

Endoscopy 2022; 54: E355–E356
DOI 10.1055/a-1532-1791
ISSN 0013-726X
published online 9.8.2021

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany