

Calcifying Fibrous Tumor in the Rectum

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CASE REPORT

A 41-year-old woman was referred to our hospital because of a rectal tumor detected incidentally by colonoscopy at another hospital. Colonoscopy revealed a submucosal tumor with slightly erythematous surface in the rectum (Figure 1). Endoscopic ultrasonography (EUS) showed a homogeneous hypoechoic lesion measuring 14 mm in diameter with shadowing consistent with calcification. Continuity between the tumor and the muscularis layer was suggested (Figure 2). Due to suspected gastrointestinal stromal tumor (GIST), laparoscopic high anterior resection was performed. The tumor located in the muscularis layer consisted of spindle-shaped cells with hyalinized fibrocollagenous tissue accompanied by psammomatous calcification and multifocal lymphoplasmacytic infiltrate (Figure 3). Immunohistochemistry showed that the spindle-shaped cells were focally positive for α -SMA (Figure 4), whereas they were negative for CD34, S100, c-kit, and DOG1. The tumor was diagnosed as a calcifying fibrous tumor (CFT).

A CFT is a benign mesenchymal tumor that is mainly found in subcutaneous tissue, pleura, and peritoneum.¹ Gastric and small intestinal CFTs have been occasionally reported, and rectal CFTs have been rarely reported. To our knowledge, the present case is the third report of rectal CFT.^{2,3} Rectal CFT may be difficult to differentiate from GIST by preoperative EUS alone. To differentiate preoperatively, a histologic diagnosis, such as

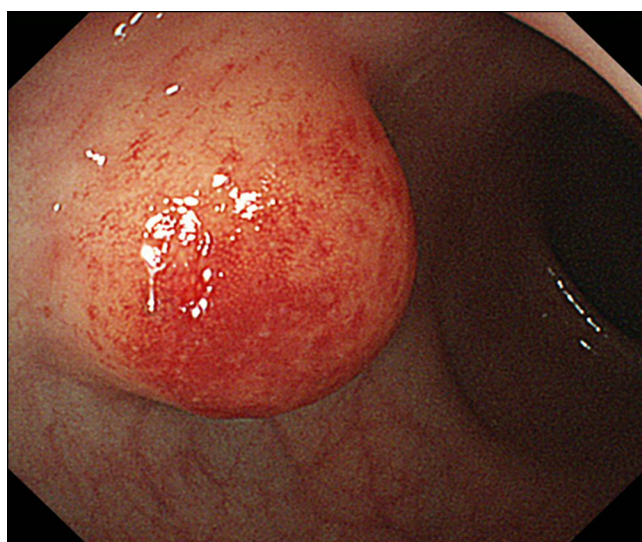


Figure 1. Endoscopic view of a submucosal tumor in the rectum.

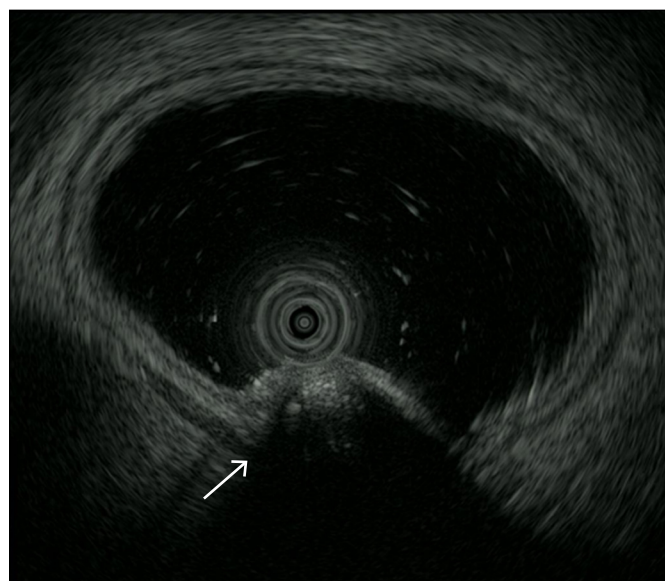


Figure 2. Endoscopic ultrasonography showing a homogeneous hypoechoic lesion and continuity between the tumor and the muscularis layer (arrow).

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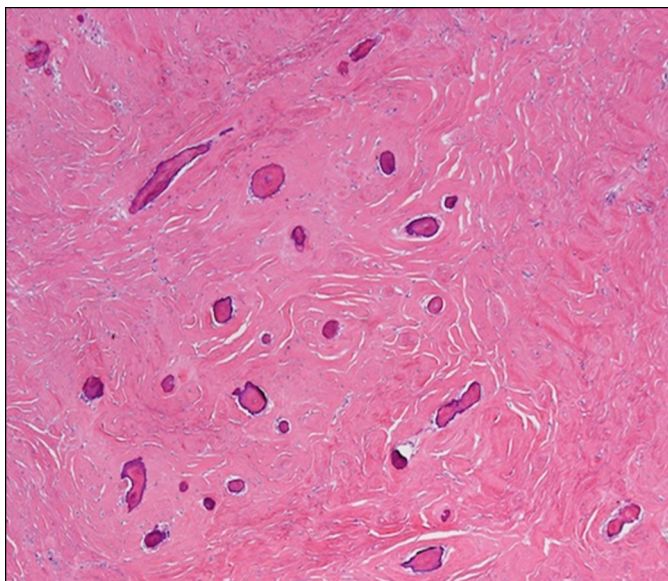


Figure 3. Hematoxylin and eosin staining of spindle-shaped cells with hyalinized fibrocollagenous tissue accompanied by psammomatous calcification and multifocal lymphoplasmacytic infiltrate (magnification 100×).

fine-needle aspiration biopsy or single-incision needle-knife biopsy, may be needed. The prognosis of CFT remains good. In 27 CFTs of the GI tract, all patients underwent complete local excision with clear margins, and no recurrence has been reported.¹ There has been no established surveillance requirement. Our patient's clinical course after the surgical procedure was favorable, with no recurrence during 8 months.

DISCLOSURES

Author contributions: All authors participated in writing the article. K. Kuroda and E. Noda edited the manuscript. T. Chikugo is the article guarantor.

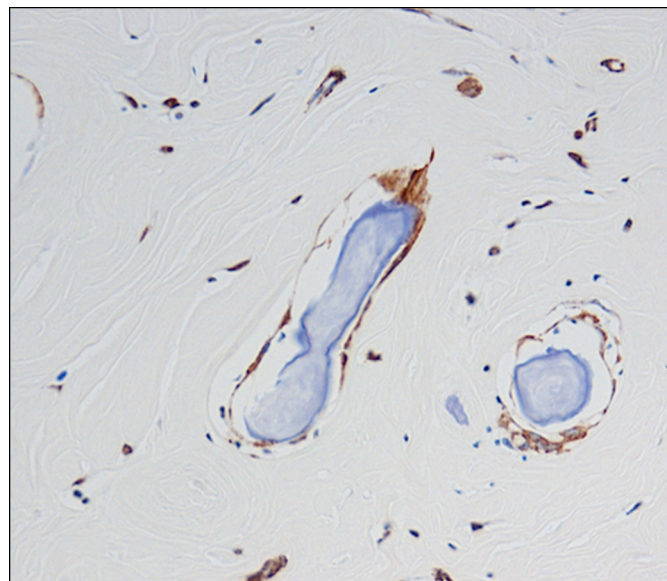


Figure 4. α-SMA staining of focally positive spindle-shaped cells (magnification 400×).

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Informed consent was obtained for this report.

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