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Jejunal schwannoma detected by video capsule endoscopy

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CASE REPORT

A 60-year-old female with a 20-year history of diabetes mellitus was admitted due to frequent melena. The physical examination revealed stable vital signs and no abdominal tenderness. Complete blood cell counts showed hemoglobin levels of 8.8 g/dl. Video capsule endoscopy (VCE) was performed as no abnormalities were detected by abdominal computed tomography, esophagogastroduodenoscopy and colonoscopy, which identified a jejunal polypoid mass (Fig. 1). Subsequent balloon enteroscopy showed a spherical submucosal tumor with bleeding (Fig. 2), which stopped spontaneously during observation. The next day, she underwent a partial (5 cm in length) resection of the jejunum. The size of the tumor was $14 \times 10 \times 7$ mm. The pathological features and immunohistochemical staining patterns were consistent with a jejunal schwannoma (Fig. 3). The postoperative course was uneventful and the patient has been asymptomatic for seven years.



DISCUSSION

Schwannomas are tumors originating from Schwann cells. Schwannomas present throughout the body along the peripheral nerves. However, small intestinal schwannomas, especially those that are not associated with systemic neurofibromatosis, are extremely rare (1-3). As most intestinal schwannomas appear as submucosal tumors, the preoperative diagnosis is difficult. To the best of our knowledge, this is the first case of intestinal schwannomas detected by VCE. The differential diagnosis includes gastrointestinal stromal tumors and leiomyomas. The definitive diagnosis can only be determined by the immunohistochemical staining. A complete surgical excision is mandatory for the treatment of schwannoma and the prognosis seems to be excellent because this disorder is mostly benign (1).

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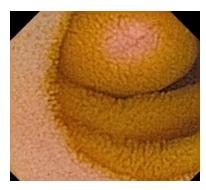


Fig. 1. Video capsule endoscopy identified a jejunal polypoid mass.





Fig. 2. Balloon enteroscopy identified a spherical submucosal tumor with bleeding.



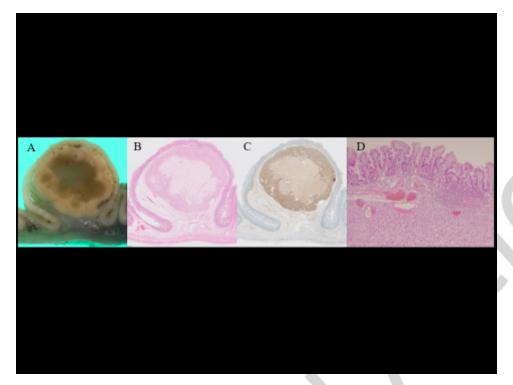


Fig. 3. Pathological findings of the resected tumor. A. Macroscopic examination showed a yellow and firm submucosal tumor with myxomatous content. B. Hematoxylin-eosin staining: the tumor cells are polymorphic. C. Immunohistochemical staining showed a strongly positive result for S-100, whereas c-kit, desmin, and chromogranin A staining were negative (data not shown). D. Hematoxylin-eosin staining: numerous vessels are seen between the mucosal layer and upper side of the tumor, suggesting that this is the bleeding source.