

Figure 1 The large polyp in the rectum.

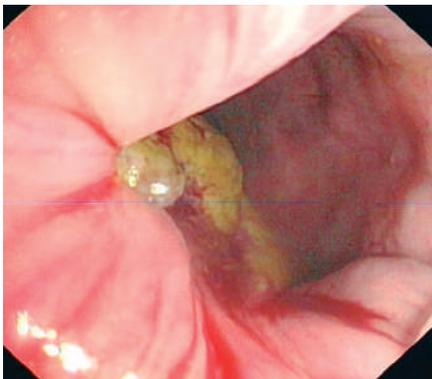


Figure 2 The polyp was located near the anal verge.

A 63-year-old woman with long-standing ulcerative colitis was seen in our outpatient clinic because she had bloody diarrhea and had lost 3 kg in weight, a similar pattern to previous episodes of colitis. Surveillance colonoscopy with biopsy 6 months previously had shown active left-sided inflammation but no other abnormalities. An oral course of prednisolone at that time led to remission.

There were no abnormalities on physical examination this time. Biochemical investigations revealed a C-reactive protein of 8 mg/L. Because she did not respond to a repeat course of prednisolone, another colonoscopy was performed. No active inflammation was seen, but a 3-cm polyp was observed in the distal rectum (Figure 1,2), which had grown in the 7 months between colonoscopies. The main concern in patients with long-standing ulcerative colitis is the develop-

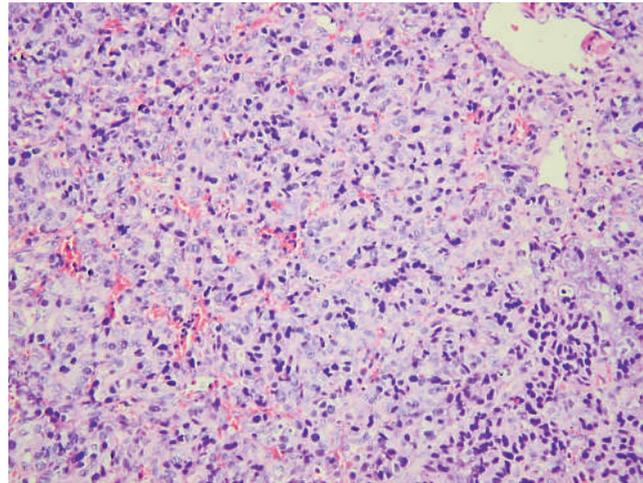


Figure 3 Histological examination of the tumor revealed cells with large nucleoli and mitotic figures (hematoxylin and eosin stain, original magnification $\times 20$).

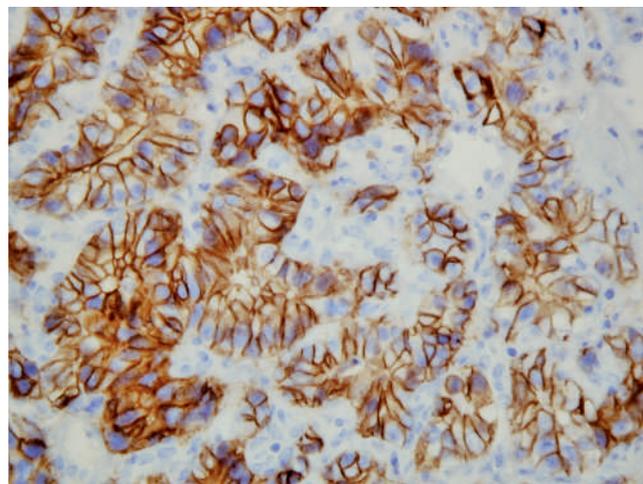


Figure 4 Immunohistochemical analysis revealed neuroendocrine differentiation, with strong staining for synaptophysin.

ment of adenocarcinoma in the colon. However, polypectomy revealed an unexpected cause of this patient's symptoms: histological examination revealed a tumor composed of specialized malignant cells (Figure 3). Positive synaptophysin staining on immunohistochemistry proved this to be a high-grade neuroendocrine tumor (Figure 4). Subsequent magnetic resonance imaging and somatostatin receptor imaging did not show any evidence of further spread of the tumor. Pathological investigation after rectal amputation confirmed this to be a neuroendocrine tumor and the resected lymph nodes were tumor-free.

The risk of colorectal cancer in long-standing ulcerative colitis is 1% annually, with a gradual increase over time. This

has led to the instigation of surveillance colonoscopy with multiple biopsies. The rapid growth of the rectal polyp in this patient led us to suspect that this was colon cancer. Several types of malignancy other than adenocarcinoma have been reported in the gastrointestinal tract, including squamous-cell carcinoma, neuroendocrine carcinoma, and various types of lymphomas. Most neuroendocrine tumors in the gastrointestinal tract are small carcinoids and are located in the rectum [1]. There have only been a few published case reports of neuroendocrine tumors in patients with inflammatory bowel diseases [2–5].

In this case, a neuroendocrine tumor mimicked the symptoms of an exacerbation of ulcerative colitis, with symptoms of abdominal pain, bloody diarrhea, and anemia. One should therefore remain aware of the possibility of malignancy, even in well-known and recently investigated patients with long-standing colitis.

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References

- ¹ Soga J. Early stage carcinoids of the gastrointestinal tract: an analysis of 1914 reported cases. *Cancer* 2005; 105: 1578 – 1595
- ² Scully RE, Mark EJ, McNeely WF et al. Case records of the Massachusetts General Hospital. *N Engl J Med* 2000; 343: 794 – 800
- ³ Sigel JE, Goldblum JR. Neuroendocrine neoplasms arising in inflammatory bowel disease: a report of 14 cases. *Mod Pathol* 1998; 11: 537 – 542
- ⁴ Dodd SM. Chronic ulcerative colitis complicated by atypical carcinoid tumour. *J Clin Pathol* 1986; 39: 913 – 916
- ⁵ Rubin A, Pandya PP. Small cell neuroendocrine carcinoma of the rectum associated with chronic ulcerative colitis. *Histopathology* 1990; 16: 95 – 97

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