

Jejunal adenoma presenting with gastrointestinal bleeding

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Small intestinal polyps are uncommon and may present with gastrointestinal (GI) bleeding. We describe the case of a patient who presented with a bleeding jejunal tubulovillous adenoma to illustrate the clinicopathological and treatment characteristics of these unusual tumours.

Case report

A 70-year-old woman presented to the emergency department with a history of progressive weakness, fatigue, shortness of breath and a hemoglobin level of 58 mg/dL. She had no history of hematemesis, melena or hematochezia, and a rectal examination did not demonstrate any abnormality. She underwent both lower and upper GI endoscopies that were within normal limits. Subsequently, a small bowel enteroclysis study suggested a proximal jejunal lesion, and an upper GI enteroscopy identified a bleeding proximal jejunal tumour.

At operation, approximately 2 feet distal to the ligament of Treitz, a small bowel tumour was identified (Fig. 1) and a segmental small bowel resection with a primary anastomosis was carried out. Pathologic examination revealed a 2.5 × 3.5 × 3.0-cm tubulovillous adenoma with no evidence of invasion (Fig. 2). She had an uncomplicated postoperative recovery.

Discussion

Despite the small bowel accounting for approximately 75% of the length and 90% of the absorptive surface area of the alimentary tract, small intestinal polyps are

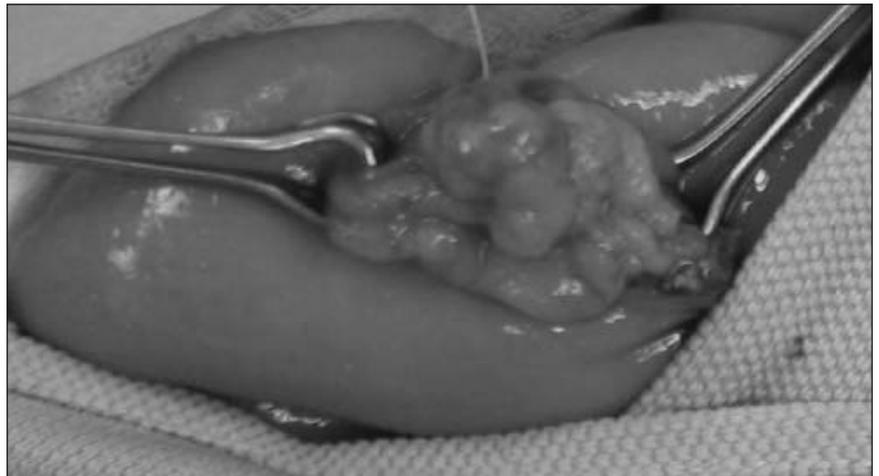


FIG. 1. Appearance of jejunal adenoma at laparotomy. An enterotomy has been carried out exposing the lesion.

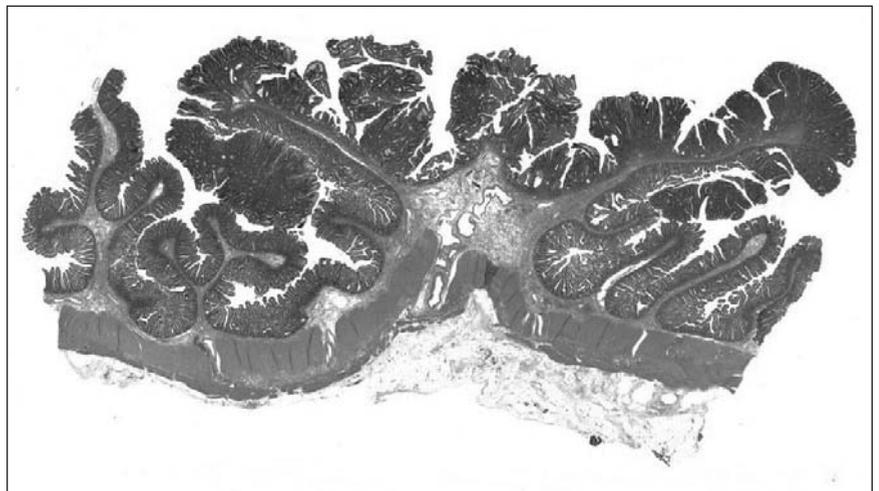


FIG. 2. Whole mount of tubulovillous adenoma of jejunum showing branching architecture without invasion of the muscularis propria. Normal villous architecture is seen on the right edge of the image.

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Notes de cas

extremely uncommon.¹ There are numerous hypotheses as to why the small bowel is seemingly resistant to the development of polyps. The liquid nature of its contents and a rapid transit time leads to less mucosal irritation and reduced carcinogenic exposure in comparison to the colon.¹ Higher levels of the detoxifying enzyme benzpyrene hydroxylase, lower bacterial counts and an alkaline pH are also believed to be important in protecting the small intestine from tumour development.¹ An important role for IgA in preventing small intestinal neoplasia has also been suggested by the observed increased incidence of small bowel neoplasms diagnosed in individuals with immunosuppression or immunoglobulin deficiency.¹

Analogous to the large intestine, small intestinal adenomas are also believed to be precursors of adenocarcinoma.² Small bowel adenomas are described as tubular, tubulovillous or villous, and the villous tumours are at highest risk for cancer development. In a 61-year literature review (1927 through 1986) of 1333 small bowel cancers and 261 adenomas, Sellner found that 29.8% of all nonpolyposis-related small bowel adenomas harboured carcinoma.² Approximately one-half of benign small bowel neoplasms are asymptomatic. Matsuo and colleagues³

reported that patient symptoms from small bowel polyps depended on the lesion size and location. Small benign tumours (< 4 cm diameter) located within the duodenum or jejunum were asymptomatic, but when located within the ileum, these lesions were symptomatic in two-thirds of patients.³

Small bowel tumours are difficult to diagnose preoperatively. Contrast radiography with a barium upper GI series or enteroclysis and CT have been of limited use in evaluating small bowel tumours.¹ As was the case for our patient, enteroscopy can be of diagnostic use in evaluating individuals presenting with occult GI bleeding from proximal small bowel neoplasms. In a cohort of 258 patients with occult GI bleeding, using push enteroscopy, Lewis and colleagues identified a source of the bleeding in 50% of cases; a small bowel tumour was responsible for the bleeding in 5% of these cases.⁴ Wireless capsule endoscopy shows great promise for identification of occult small intestinal tumours. In a cohort of 209 patients presenting with obscure GI bleeding at our centre, Enns and colleagues reported a 51% diagnostic yield for capsule endoscopy.⁵ Because of their risk of associated malignancy or complication, it is recommended that small intestinal adenomas should all be removed by operation.

This case highlights the diagnostic challenge and the importance of surgical resection of small intestinal adenomas because of their cancer risk and the morbidity associated with these uncommon neoplastic tumours.

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Le American College of Surgeons, le Canadian Association of Bariatric Physicians and Surgeons, l'Association canadienne des chirurgiens universitaires, le Comité canadien de l'éducation chirurgicale de premier cycle, l'Association des chirurgiens James IV, le Ontario Association of General Surgeons, et l'Association canadienne de traumatologie sont au nombre des sociétés qui appuient cette activité.

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