Rare disease

Obscure-occult bleeding: resolution of unexplained chronic sideropenic anaemia by colonoscopic removal of a colonic leiomyoma

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Summary

Although leiomyomas of the stomach or small intestine are relatively common, those of the colon or rectum are rare. Several cases of endoscopic resection of colorectal leiomyomas have been described. However, conventional polypectomy of leiomyomas can result in perforation. To reduce the risk of perforation, submucosal injection can be performed before removal. We report a case of chronic sideropenic anaemia in a patient affected by leiomyoma of the sigmoid colon in which after complete endoscopic enucleation of the lesion we obtained the stable resolution of anaemia.

BACKGROUND

Smooth muscle tumours of the gastrointestinal tract are uncommon, but those arising in the colon and rectum are rare and represent only 3% of all alimentary tract leiomyomas.¹ Several cases of endoscopic resection of colonic leiomyomas have been described.²⁻⁵ Because conventional

polypectomy of leiomyomas can result in perforation, the technique of submucosal injection polypectomy can be used to reduce the risk of this complication. We report a case of a woman affected by sigmoid leiomyoma in which complete enucleation was performed at the time of colonoscopy using this method.

Figure 1 Colonic leiomyoma with signs of bleeding.

Figure 2 Histological section of excised polyp.

CASE PRESENTATION

A 56-year-old woman was seen because of intermittent episodes of abdominal pain and occasional rectal bleeding, occurring twice only and appearing as streaks of blood in the stool. She had no other complaints. Her past medical history was significant in that 2 years before the haematochezia occurred the patient was suffering from chronic sideropenic anaemia periodically treated with iron taken daily. Examination of the abdomen showed no masses or organomegaly. Upper endoscopy, single contrast barium enema examination, abdominal ultrasonography and serological tests for celiac disease (total IgA, IgA and IgG antigliadin antibodies (IgAAGA and IgG-gliadin antibodies (AGA)), IgA and IgG₁ antiendomysium antibodies (IgA- endomysial antibodies (EMA) and IgG₁-EMA), and IgA and IgG antitissue transglutaminase (IgA- and IgG-anti-tTG)) were negative. At the time of colonoscopy, haemoglobin levels was 9.5 g/dl (normal range 11.5–15.5 g/dl); haematocrit was 32% (normal range 36–46%); mean corpuscular volume 75 fl (normal

range 88–100 fl). A total colonoscopy was performed by video-colonoscopy OLYMPUS, CFQ-165L. A 10 mm sessile polyp on a narrow base was found 35 cm from the anus. The mucosa overlying this polyp was ulcerated and showed signs of recent bleeding (figure 1). No other lesions were identified.

TREATMENT

Tractive force suggested that the polypoid lesion was not connected to the muscularis propria. A 8 mm saline solution was injected beneath the lesion at a site above the muscularis propria; a snare loop was passed over the base of the polypoid tumour and then closed until it encircled the lesion snugly. The lesion was resected with electro-surgical cutting current in bipolar mode. There were no complications after the procedure. Histologically, the lesion was composed of well-defined smooth muscle tissue arising from the muscularis mucosae. No mitotic figures, increased cellularity or nuclear abnormalities were present. The cells of the tumour were positive for desmin

and α smooth muscle actin. CD34 and CD117 were negative (figure 2).

OUTCOME AND FOLLOW-UP

As there was no evidence of malignant potential, the tumour was removed completely and surgery was not performed. Colonoscopy repeated 6 months after endoscopic resection for surveillance was negative. The haemoglobin levels have stabilised at 12.5 g/dl and the patient no longer needed to take iron supplements.

DISCUSSION

Previously reported experiences with colorectal leiomyomas were published before colonoscopy became widely available and, therefore, appear almost exclusively in the surgical literature.^{4–5} These series have dealt more with rectal than with colonic tumours. Until the relatively recent advent of colonoscopic polypectomy, small mucosal lesions such as that present in our patient would not have been removed by a surgical approach but would have been followed radiographically and resected only if significant enlargement occurred. The clinical and radiographical features of colonic leiomyomas are variable and depend on the pattern of tumour growth and the muscle tissue from which they arise. As experience with colonoscopy continues to widen, reported cases of some small mucosal lesions grossly identical to hyperplastic or adenomatous polyps will undoubtedly be identified as leiomyomas after electrocautery excision.^{6–8} Small mucosal lesions arising from the muscularis mucosae are likely to be asymptomatic. These small lesions may be overlooked unless high-quality, air-contrast barium enema radiographs are obtained nevertheless they can be discoveries because may lead to rectal bleeding.⁴ Less frequently, these tumours appear as constricting lesions resembling adenocarcinoma⁹ or, aside from rectal bleeding, colonic leiomyomas may produce symptoms by virtue of the large size that they can attain: there have been described cases of abdominal pain, palpable abdominal mass, change in bowel habits and intussusception.¹⁰ In literature there are a few other cases of leiomyomas of the colon with polypoid appearance, sessile, semipedunculated or pedunculated, removed with a similar technical by the use of colonoscopic snare electrocauterisation after normal saline submucosal injection without complications instead of resorting to surgical resection.^{3 11 12}

In our case, according to Takeda *et al*,⁸ we presume that the submucosal tumour was pulled towards the lumen

resulting in ulceration, possibly due to mucosal ischaemia, and resulting in sideropenic anaemia from chronic loss definitively resolved with endoscopic resection of the lesion.

Learning points

- ▶ Leiomyomas are extremely rare in the colon and should be considered as a differential diagnosis on encountering a polyp on routine endoscopic examinations.
- ▶ Complete endoscopic removal of the tumour is difficult because it is often submucosal in origin.
- ▶ Snare polypectomy is adequate without any complications.
- ▶ Complete removal and follow-up are necessary precautions for tumours with any atypia or mitotic activity.
- ▶ This case highlights the importance of a careful endoscopic investigation in cases of unexplained chronic sideropenic anaemia.

Competing interests None.

Patient consent Obtained.

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