CASE REPORT

Rectal schwannoma on endoscopic polypectomy

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SUMMARY

Conventional gastrointestinal schwannomas are rare, most frequently occurring in the stomach while colorectal locations are uncommon and only a small number of cases have been reported. We are reporting this case as it is a very rare tumour at a very rare location. Though schwannomas are considered benign neoplasms, rare cases of malignant schwannoma have been reported. Owing to the uncertainty of the prognosis, our patient is under long-term endoscopic surveillance.

BACKGROUND

We are reporting this case as it is a very rare tumour at a very rare location. Although schwannomas are considered benign neoplasms, rare cases of malignant schwannoma have been reported.¹ Therefore, clinical follow-up is paramount for these patients.

CASE PRESENTATION

A 49-year-old RAF personnel presented to his general practitioner with symptoms of rectal bleeding over a 1-month period. The bleeding was intermittent and was noted on the toilet paper. There was no pain on defecation or any other red flag symptoms such as weight loss, night sweats or change in bowel habit.

The patient reported that he had a similar problem previously where he had a colonoscopy 17 months earlier and rectal polyps (one on the right and one of the left measuring 1–1.5 cm in size) were removed and proven to be non-malignant. He was advised to have repeat colonoscopy in 3 years' time.

The patient had a history of asthma, hypothyroidism and gastro-oesophageal reflux. He was on salbutamol and beclomethasone inhalers, levothyroxine and omeprazole. He was a non-smoker and consumed minimal alcohol.

On examination he appeared well and his abdomen was soft with no palpable mass or tenderness. The digital rectal examination was unremarkable and there was no peri-anal or rectal pathology.

INVESTIGATIONS

A repeat colonoscopy showed several sessile polyps which were smooth and well-defined in the distal colon, the largest of which was in the sigmoid colon. The largest polyp was removed by endoscopic mucosal resection (EMR) while the smaller polyps were biopsied. These biopsies contained benign neurilemmomas (schwannomas) and there were no atypical features demonstrated. Routine laboratory investigations (including full blood

Figure 1 Sessile polyps at flexible sigmoidoscopy in the rectum and rectosigmoid junction.

count, albumin and liver function test) were within the normal range.

Follow-up flexible sigmoidoscopy (FOS) 3 months later demonstrated multiple 2–3 mm sessile polyps similar to our findings in the rectum and rectosigmoid junction previously (figure 1). Polypectomy was again performed by EMR. Biopsies of these polyps further confirmed the diagnosis of schwannoma (figures 2 and 3).

DIFFERENTIAL DIAGNOSIS

The common differential diagnosis for patients with colonic polyps include adenoma (eg, familial adenomatous polyposis), inflammatory bowel disease, hamartomatous polyposis syndromes (eg, Peutz-Jeghers' syndrome) and colonic adenocarcinoma. The less common benign submucosal lesions include leiomyomas, lipomas, lymphangiomas and fibrovascular lesions. In addition to adenocarcinoma, other

Figure 2 Photomicrograph of polypoid rectal schwannoma (H&E stain; original magnification $\times 40$).

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Figure 3 Photomicrograph of polypoid rectal schwannoma (immunohistochemistry for S100; original magnification $\times 40$).

malignant lesions (or potentially malignant lesions) include carcinoids, lymphomas, neuroendocrine tumour, squamous cell carcinoma, sarcomas and schwannomas.²

OUTCOME AND FOLLOW-UP

There were no signs of recurrence in the past 6 months since the endoscopic polypectomy. However, given the uncertain prognosis, he will be under long-term clinical follow-up with intermittent endoscopic surveillance.

DISCUSSION

Schwannomas (neurilemmomas) are benign tumours derived from the Schwann cells that form the neural sheath. The majority arise in the subcutaneous tissues of the distal extremities and the head and neck region. Schwannomas located in the colon and rectum are extremely rare.

This patient presented with rectal bleeding which prompted further investigations. In most cases, due to the indolent nature of the tumour, patients are usually asymptomatic. However, other potential presenting symptoms include anaemia, bowel obstruction, tenesmus, mild fever, asthenia and pain.³

Endoscopically, it is difficult to differentiate the morphological features of a schwannoma from other colonic tumours such as colonic adenomas as there are variations in their endoscopic features.⁴ In general, schwannomas are homogeneous and well-defined while colonic adenomas may vary from having a short or long stalk to being sessile or flat with irregular lobulated appearance.^{4 5}

A review by Tedeschi *et al*³ noted that the biopsy specimens for the diagnosis of schwannomas are limited due to the submucosal growth of the tumour necessitating histological and

immunological examinations of the surgical specimen. However, both biopsy specimens in this case yielded the diagnosis.

The management of schwannomas involves complete excision and even hemicolectomies, although simple enucleation may be sufficient due to its benign nature.^{6–8} Our patient had EMR and there were no signs of recurrence in the past 6 months. As the prognosis of schwannomas is unknown, the patient will be under long-term clinical follow-up with intermittent endoscopic surveillance. We advocate EMR for small rectal schwannomas while endoscopic submucosal dissection or hemicolectomies are reserved for larger lesions.⁶

Learning points

- ▶ Rectal schwannomas are a rare but important differential of colonic sessile lesions.
- ▶ Although rectal schwannomas are considered benign, rare cases of malignant transformation have been reported, necessitating long-term clinical follow-up.
- ▶ There is insufficient evidence to determine the total period of follow-up and whether endoscopic surveillance improves the patient outcome.

Contributors VB wrote and revised the abstract critically. WSC revised the abstract critically. MP supervised the case and provided guidance on writing the abstract.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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