CASE REPORT

Rectal pseudodiverticulum

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Accepted 13 June 2014

SUMMARY

We present the case of a 77-year-old woman who initially presented 13 years ago to a colorectal clinic with a change in bowel habit and bleeding per rectum over 7 months. These symptoms were attributed to a tubulovillous rectal adenoma which was excised transanally, but recurred five times in 12 years. The most recent endoscopy showed recurrence of the rectal adenoma and a new rectal diverticulum. Diverticula in the rectum are rare and only a few reports of this condition exist in the literature. Repeated surgical resections and endoscopic polypectomies may have caused a weakness in the rectal wall and led to a pseudodiverticulum.

BACKGROUND

Rectal diverticular disease is extremely rare. There are only scattered cases in the literature since 1911 when it was first described. To the best of our knowledge, this is the first case in the literature associated with a tubulovillous adenoma and multiple resections and the second case described with clear endoscopic images.¹

CASE PRESENTATION

A 77-year-old woman presented to a colorectal clinic 13 years ago reporting of a 7-month history of change in bowel habit and bleeding per rectum. She described episodes of loose motions consisting of stool mixed with mucus and blood, with associated tenesmus. Her medical history included diverticular disease of the colon, for which she had undergone an emergency Hartmann's procedure with subsequent reversal, type II diabetes mellitus, polymyalgia rheumatica, osteoporosis and osteoarthritis.

Clinical examination was unremarkable. At her initial presentation, endoscopy showed a large sessile rectal polyp and florid sigmoid diverticulosis. The polyp was removed by a transanal approach and histology confirmed tubulovillous adenoma.

Over the subsequent 13 years her symptoms recurred on five separate occasions. On each occasion the adenoma was excised and the histology was benign. Endoscopy on those five occasions showed recurrence of the sessile rectal adenoma. The most recent endoscopy showed a recurrent rectal polyp of similar histology in proximity to a rectal diverticulum, which had not been seen on any previous investigations (figures 1–3).

OUTCOME AND FOLLOW-UP

Surveillance colonoscopy is being performed every 3 years, as per national guidelines.

Figure 1 Endoscopic image of the rectal diverticulum with tubulovillous adenoma.

DISCUSSION

There are a handful of cases of rectal diverticula reported in the literature since 1911.² A study looked at the incidence of rectal diverticular disease in 545 patients undergoing barium enemas between the years 1987 and 1988, and reported no such cases.³

Little is known about the pathogenesis of rectal diverticula. The predisposing factors include conditions which lead to a weak rectal wall such as primary muscular atrophy, absence of support structures such as the coccyx. Increased intrarectal

Figure 2 Low rectal diverticulum.

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To cite: Singh S, Savage L. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2013-201888

Figure 3 Close up view of the rectal diverticulum.

pressure caused by recurrent faecal impaction is also thought to contribute.⁴

The pathogenesis of the rectal diverticulum in our case may be related to repeated transanal resections and endoscopic polypectomies. It is possible that these resections caused a weakness in the rectal wall.

In this case the rectal pseudodiverticulum is asymptomatic and therefore required no specific treatment.

Techniques such as resection by a stapler device⁴ and transanal diverticulectomy have been described in severely symptomatic patients.⁵

Learning points

- Rectal diverticula and pseudodiverticula are a rare finding and often associated with diverticular disease of the colon.
- Little is known about the pathogenesis of rectal diverticular disease. In this case it may be polyposis and associated interventions predisposed to pseudodiverticulum formation.

Contributors SS reviewed the case notes, summarised history and performed a literature search. LS obtained the endoscopic images, contributed to the discussion and performed a literature search.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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