

Leiomyoma Of The Rectosigmoid Junction In An Adult

N Husain, R Botchu, M Shahabdeen, J Schofield, L South

Citation

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Abstract

Colonic Leiomyoma is a rare condition. Smooth muscle tumors arising from the colon constitute only 3% of gastrointestinal leiomyomas¹ and about 1% of all Gastro intestinal neoplasms. We report a patient with a 7 mm Leiomyoma of the recto-sigmoid junction that was successfully removed by conventional colonoscopic snare polypectomy, without complications. We believe that to be the first reported case of Leiomyoma of the recto-sigmoid junction in an adult. Leiomyomas though rare should be considered as a differential diagnosis on encountering a polyp on routine endoscopic examinations.

INTRODUCTION

Colonic Leiomyoma is a rare condition. Smooth muscle tumors arising from the colon constitute only 3% of gastrointestinal leiomyomas¹, and about 1% of all Gastro intestinal neoplasms². Complete endoscopic removal of the tumor is difficult because it is often submucosal in origin. We report a patient with a 7 mm Leiomyoma of the recto-sigmoid junction that was successfully removed by conventional colonoscopic snare polypectomy, without complications. We believe that to be the first reported case of Leiomyoma of the recto-sigmoid junction in an adult

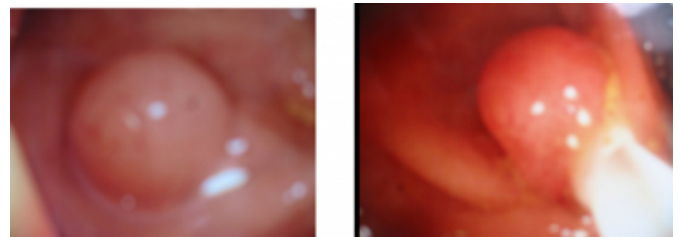
CASE REPORT

A 66years old gentleman seen in the Outpatient's Department in June 2002, with a history of recurrent left iliac fossa pain. There were no features to suggestive of a neoplasm.

Physical examination and lab tests were non-contributory except for a positive fecal occult blood. Fibro-optic colonoscopy revealed a moderate diverticular disease. A polyp was found at the recto-sigmoid junction that was removed by snare polypectomy and sent for histopathology.(Figure 1)

Figure 1

Figure 1: Polyp on Colonoscopy at rectosigmoid junction



Histological sections show a well circumscribed spindle cell proliferation in the large bowel submucosa. The nodule is of low cellularity and is composed of elongated spindle cells arranged in fascicles. The nuclei are elongated and cigar-shaped, and there is minimal nuclear pleomorphism. No mitotic figures are seen. Immunohistochemistry is positive for smooth muscle actin (SMA) and negative for c-kit (CD117). These are the typical morphological features of a benign smooth muscle tumour (leiomyoma). (Figures 2,3,4)

Figure 2

Figure 2: High power view of the leiomyoma demonstrating the elongated spindle cell with cigar shaped nuclei and no mitotic activity or pleomorphism

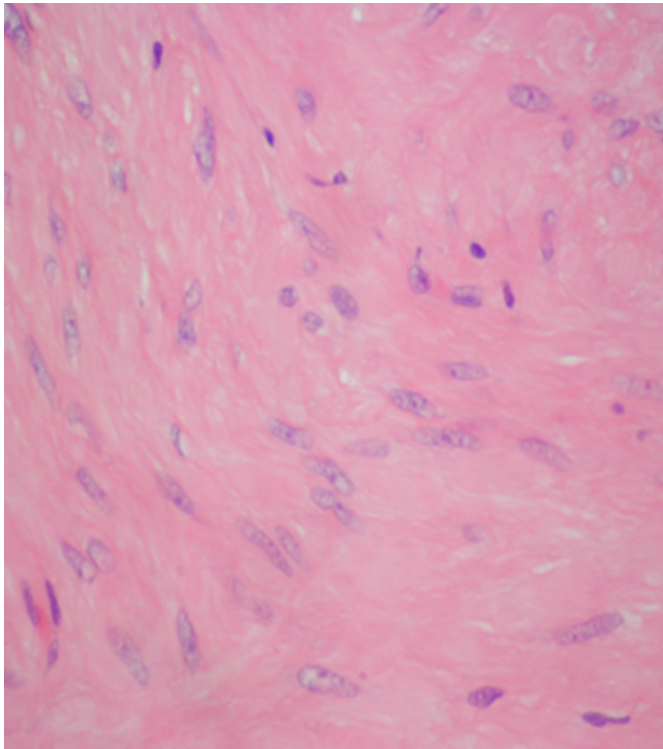


Figure 3

Figure 3: High power view of the SMA immunostain, confirming expression of this muscle specific marker

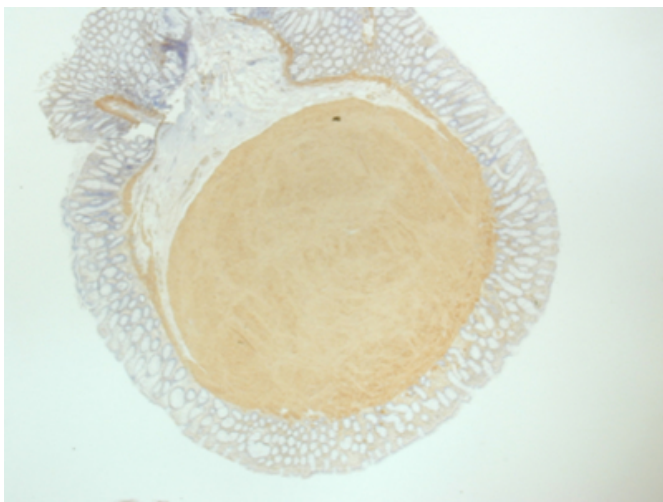
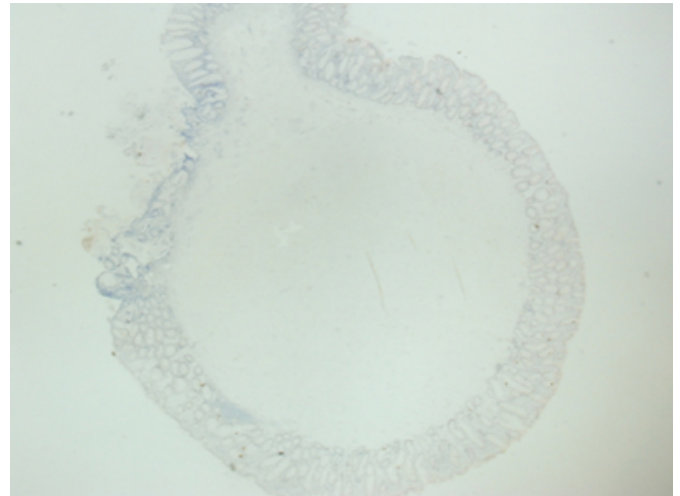


Figure 4

Figure 4: Low power view of an immunostain for CD117, a marker usually expressed in GIST but not in leiomyoma. It is negative in this case



DISCUSSION

Most gastro-intestinal leiomyomas occur in the stomach but some may occur in the esophagus, small intestine, colon, rectum and anal canal. Those in the colon represent only 3% of all gastrointestinal leiomyomas¹ and about 1% of the gastrointestinal neoplasms². The sigmoid colon and the transverse colon appear to be the most frequent sites of tumor (leiomyoma) occurrence in the colon.¹

Most reported leiomyomas are sessile intraluminal or intramural tumors that usually cause bleeding, mechanical obstruction. They can also present as pedunculated extra luminal mass of the colon.² Hence the symptoms vary greatly from absolutely none to severe pain, signs of bowel obstruction or bleeding per rectum.

Smooth muscle tumors are found in patients of all ages, with a gradual increase in frequency and malignant degeneration up to the sixth decade.² Both males and females are affected by the tumour with a slightly greater frequency on females; however, Meittinen et.al observed in their study that there was a significant male predominance.³

Many of these tumors are discovered incidentally on routine endoscopic examination of the large bowel. Endoscopically, these tumors can present as pedunculated intramural or intraluminal polyps, and they may look like the more usual adenomas.

The biological behavior of smooth muscle tumors varies from benign to locally aggressive, to highly malignant. The biological behavior may not be reflected by the histology as

even benign looking smooth muscle tumors may metastasize. Thus, a combination of the site, tumor size, histological appearance and mitotic count gives the best predictor of behavior

Surgical excision is the treatment of choice for most leiomyomas. Wide resection is recommended for smooth muscle neoplasms of the digestive tract owing to the difficulty in differentiation benign from malignant tumors. Snare polypectomy is an adequate treatment, but ensuring the complete removal and follow-up are necessary precautions for tumors with any atypia or mitotic activity.³

CONCLUSION

This is the first reported case of successful endoscopic removal of a Leiomyoma of the recto-sigmoid junction in an adult, without any complications. Leiomyomas are

extremely rare in the colon, and should be considered as a differential diagnosis on encountering a polyp on routine endoscopic examinations.

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