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RESEARCH ARTICLE

ENDOSCOPIC RESECTION OF RECTAL POLYP REVEALING A LEIOMYOMA

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Abstract

Background: Rectal leiomyoma is a rare histological entity with nonspecific appearance on endoscopy and scarce literature regarding its management. The paucity of available literature is likely due to its benign behavior, and treatment is only indicated for symptom control. As such, there are many unknowns regarding polypectomy effectiveness as a treatment and whether it is necessary to monitor after excision. Here, we review published cases of rectal leiomyoma and its proposed endoscopic treatments and outcomes.

Case Summary: We report a case of a rectal leiomyoma diagnosed after endoscopic resection of a rectal sessile polyp. A 70-year-old woman with longstanding diabetes was referred for further investigation of chronic constipation and recurrent anal abscess. Colonoscopy revealed a 7-mm sessile polyp in the rectum. Polypectomy was performed using a cold snare, and histology confirmed a rectal leiomyoma and an R0 resection. No bleeding and no residual local lesions were found on control endoscopy.

Conclusion: R0 endoscopic resection is an effective, low-risk treatment for rectal leiomyoma, and no follow up is required.

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Introduction:-

Leiomyomata are benign tumors of smooth muscle that are commonly found in the uterus (i.e. uterine fibroids). Less frequently, leiomyomata are found in the digestive tract. Rectal leiomyoma is a rare entity, comprising about 0.03% to 0.05% of all rectal tumors^[1]. Here, we present a case of rectal leiomyoma diagnosed on histology after endoscopic exploration for chronic constipation in a 70-year-old woman that led to the excision of a sessile polyp from the rectum.

Case Presentation

Chief complaints

The patient presented with complaint of chronic constipation and recurrent anal abscess.

History of present illness

The patient's presenting symptoms were chronically present without known etiology.

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History of past illness

The patient had no pertinent history of past illness.

Personal and family history

The patient's personal history was significant for longstanding diabetes mellitus. Her family history was noncontributory.

Physical examination

On physical examination, the patient was found to have a perianal induration without an obvious source.

Laboratory testing

No specific abnormalities were detected on routine laboratory testing.

Imaging examination

Colonoscopy revealed a 7-mm sessile polyp in the rectum and four sessile polyps in the transverse colon. The surface of the rectal sessile polyp showed an intact mucosal covering by gross observation, with regularly-arranged, round pits under magnification.

Treatment

Rectal polypectomy was performed using a cold snare. The transverse colon polyps were removed using an endoscopic mucosal resection technique and cold biopsy forceps.

Final Diagnosis

Histological analysis of the rectal polyp revealed a fascicular pattern of smooth muscle bundles without atypia or frequent mitoses. Immunohistochemistry revealed that the tumor cells expressed AML and desmin, and were negative for DOG1 and S100. The other polyps excised from the transverse colon were also assessed; two were hyperplastic polyps and two demonstrated low-grade dysplasia consistent with tubulovillous adenoma.

Multidisciplinary Expert Consultation

A multidisciplinary panel recommended magnetic resonance imaging due to the patient's history of recurrent anal abscess. The panel also recommended follow-up colonoscopy to monitor the dysplastic polyp from the transverse colon. No follow-up was recommended with respect to the rectal leiomyoma.

Outcome And Follow-Up

No residual local lesions were found on follow-up colonoscopy or magnetic resonance imaging.

Discussion:-

Advances in endoscopic devices and techniques enable understanding of typical endoscopic features of various diagnostic entities, and make it possible to anticipate endoscopic treatment even before histologic confirmation of disease. However, there are lesions that can only be diagnosed histologically, and for these management must be planned after excision.

Clinical manifestations of rectal leiomyomata range from asymptomatic to intestinal obstruction, hemorrhage, or perforation into the peritoneal cavity^[4]. Although polypoid leiomyomata in the colon and rectum are rare^[11], they have become more frequently detected during colonoscopy^[2,5]. Colonic leiomyomata predominantly appear as sessile lesions, but they can also form semi-pedunculated or pedunculated lesions^[3]. Treatment of rectal leiomyomata varies based on depth of invasion, and, given the accessibility of the rectum, transanal resection is commonly indicated. Endoscopic resection of submucosal tumors has also been discussed in several case reports and literature reviews^[9]. Choi et al^[6] reported that they have removed colorectal leiomyomata using cold forceps biopsy (n=10) and conventional polypectomy or endoscopic mucosal resection (n=12) and have experienced no complications such as bleeding or perforation. Endoscopic snare polypectomy can be performed for complete tumor removal^[7]; excisional biopsy can also be an effective method of resection by taking multiple biopsies until full resection is accomplished^[1,8].

Rectal leiomyoma is a rare clinical entity typically manifesting in polypoid form rather than the typical appearance of a submucosal tumor. As such, endoscopic diagnosis is difficult based solely on the gross morphology, and endoscopic resection is the treatment of choice for leiomyomata arising from the muscularis mucosa of the rectum.

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