



A Case Report of Rectosigmoid Prolapse Secondary to Pedunculated Adenomatous Polyp

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Abstract

Rectal prolapse is defined as entire thickness rectum protrusion past the anal sphincter. The prolapsed section of the rectum can become cancerous in rare cases. Although the exact incidence of rectal prolapse is unknown, it is a relatively uncommon condition. We present a case of rectal prolapse accompanied by neoplastic transformation.

The presented case study is a 53 years old male patient with a known case of hypertension and major depressive disorder otherwise no other known chronic medical illness presented with rectal prolapse of six-month duration. With the same diagnosis colonoscopy with biopsy was performed and confirmed rectal mass 20 cm from the anal verge, trans abdominal enterotomy with polypectomy done and tissue biopsy confirmed tubulovillous adenoma with low-grade dysplasia.

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Introduction

Rectal prolapse refers to a group of problems caused by partial or full-thickness intussusception or invagination of the rectal wall, with variable degrees of protrusion to and through the anal sphincter complex [1]. Any abnormal growth of tissue extending from a mucous membrane is referred to as a "polyp" [2]. Colorectal polyps are histologically characterized as neoplastic or non-neoplastic. Even though there are multiple reasons, most rectal prolapses are due to anatomical causes, rarely rectal prolapse also can be caused by a polyp acting as a leading point for intussusception [5].

Narrative

A 53 years old male with known hypertension and major depressive disorder on treatment and follow-up started suffering from straining during defecation, altered bowel habits with

blood mixed (hematochezia), and intermittent abdominal pain for three years for which he was treated with a diagnosis of hemorrhoids several times. Six months back he comes to the surgical outpatient department with a complaint of sudden onset protrusion of mass per anus during urge to defecate with excessive straining associated rectal bleeding and sensation of foreign body.

On Physical examination; vital signs were stable, abdominal was soft, non-tender with no palpable mass, and no sign of fluid collection. a pertinent positive finding on digital rectal examination was, soft, fragile tender, 10x8cm mass, cauliflower polyp in shape totally occludes anal canal and oozing blood from the mass.

After informed consent was taken and the Patient was brought to the procedure room and put in a jackknife position under possible aseptic technique manual reduction of the mass



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was tried and was successful on the second attempt.

The anal sphincter was intact.

A computed tomography scan of the abdomen with IV contrast -showed soft tissue attenuating mildly enhancing lesion which fits the superior rectum but no thickening of the rectal wall seen and mesorectal fat and no mesorectal lymphadenopathy seen likely rectal polyp.

Colonoscopy was subsequently performed and revealed a large mass in the rectum about 20cm from the anal verge; it totally occludes the lumen. It has a villous surface appearance. The scope was not able to pass beyond the mass. Conclusion – Rectal mass? Advanced polyp? Carcinoma. the biopsy was taken during colonoscopy:

Gross: Multiple tiny gray-white tissue bits 1. Om in aggregates.

Microscopy: Crowded irregular variable-sized ducts lined by tall columnar cells with crowded and elongated hyperchromatic nuclei with active mitosis. Features of invasion not seen. pathologic Diagnosis: Adenomatous polyp/Tubular adenoma

Surgical management

After informed written consent was taken, laparotomy with sigmoid enterotomy was done and the polyp was resected out with tumor-free margins.

Final diagnosis postoperative tissue biopsy

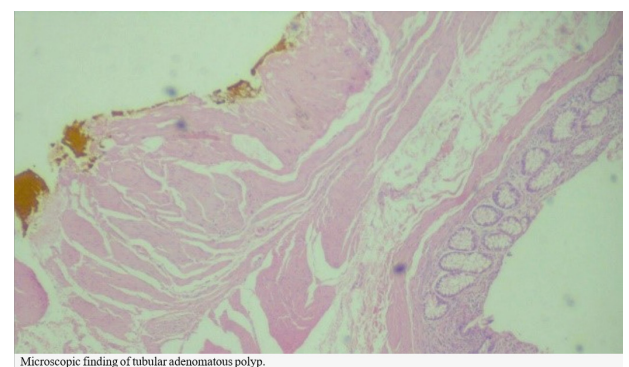
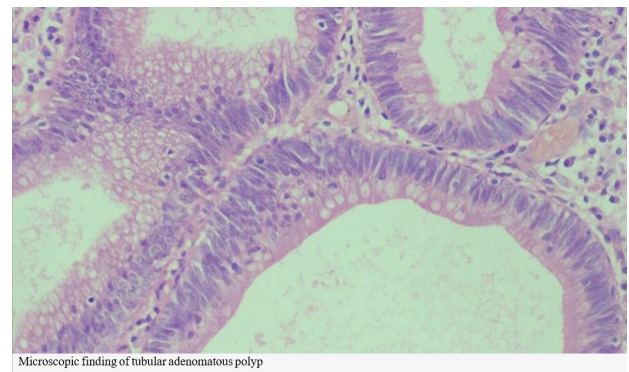
Microscopic description: rectal mucosal tissue with crowded glands having tubular and villous architecture lined by pseudo stratified columnar epithelium having elongated hyper chromatic nuclei and few mitotic figures. margin is free.

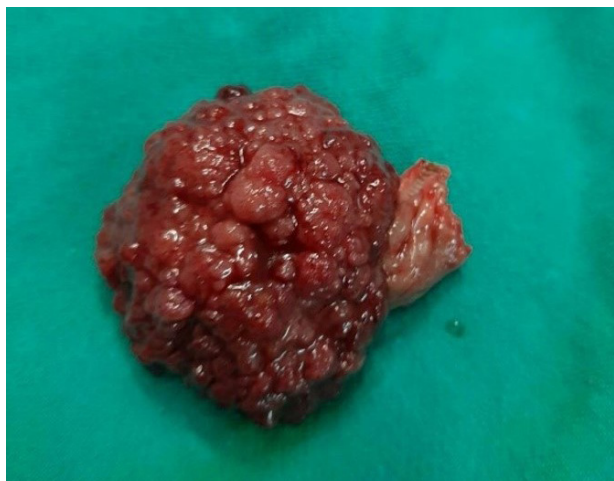
Macroscopic Examination (gross): one gray-white tissue with numerous small polypoid structures measuring 6x4x3.5cm with attached stalk measuring 2.5cm and largest polyp 1.5cmx1.5cm.

Conclusion: Rectum Conventional tubulovillous adenoma with low-grade dysplasia

Diagnostic

Type	value	unit
12-11-2021		
Albumin	3.7	g/dL
ALP (alkaline phosphatase)	89	IU/L
CEA (carcinoembryonic antigen)	2.81	ng/mL
Creatinine	0.7	mg/dL
PT (prothrombin time)	16	seconds
27-12-2021		
Hb (hemoglobin)	13.8	g/L
Neutrophils	64.6	%
Platelet count	361000	cells/ μ L
WBC (total white blood cells)	4300	cells/ μ L





Discussion

Rectal prolapse refers to a group of problems caused by partial or full-thickness intussusception or invagination of the rectal wall, with variable degrees of protrusion to and through the anal sphincter complex [1]. Although the exact incidence of rectal prolapse is unknown, it is a rather uncommon condition [2,3]. The incidence is more in females than males and increases significantly with age, the occurrence of rectal prolapse at younger age almost always relates to developmental delay or a psychiatric diagnosis requiring medical management [1].

Most commonly patients with rectal prolapse present with non-specific symptoms, such as fullness or a lump inside the rectum, constipation, fecal incontinence, obstructed defecation, mucus drainage, and/or bleeding. Because rectal prolapse may often be confused with hemorrhoidal prolapse [2], patients might be treated repeatedly for hemorrhoid at multiple facilities. Yet a true total rectal prolapse can present as a large rectal mass or bulge that may or may not spontaneously reduce at the completion of a bowel movement and straining [4]. The anatomic origin of rectal prolapse might vary and is mostly related to the intricacy of the pelvic floor. A redundant sigmoid colon, diastasis of the levator ani, loss of the vertical posture of the rectum and its sacral attachments, and/or an excessively deep cul de sac is the most common anatomic abnormalities associated with rectal prolapse. Furthermore, simultaneous pelvic dyssynergia, paradoxical puborectalis contraction, or sphincter injury can all alter a patient's symptoms. But rectal polyps also can be the cause by acting as a leading point for intussusception [5].

Any abnormal growth of tissue extending from a mucous membrane is referred to as a "polyp" [2]. Colorectal polyps are histologically characterized as cancerous or non-neoplastic. The vast majority of polyps are non-neoplastic lesions. All adenomas have varying degrees of dysplasia ranging from mild to severe. The malignant potential of adenomas is thought to be related to the kind of polyp, size, and degree of dysplasia [6].

Adenomas with high-grade dysplasia had a risk of 27 percent in 15 years, compared to low-grade adenomas, which have a risk of just 5 percent [2].

In this particular case trans abdominal surgical approach was used and enterotomy was done. After resection of the polyp near the rectosigmoid junction with a tumor-free margin is done the enterotomy was closed.

The risk of recurrence of adenomas has been examined in much research and become obvious that adenomatous polyps with high-grade dysplasia have a higher likelihood of reoccurring in a metachronous manner with diverse stages of dysplasia or becoming cancer [2].

Despite our finding of tubulovillous adenoma with low-grade dysplasia with free tumor margin, we kept the patient under colonoscopy screening surveillance.

Patient Perspective

The patient is being followed at the surgical referral clinic so far and with no sign and symptom recurrence and no colonoscopic evidence of recurrence. He claims satisfied with the care he received.

Conclusion

Patients with rectal prolapse require a tailored surgical approach. The recurrence rate of rectal prolapse, with incomplete management and tubulovillous adenomatous polyps, is high. even though, after discussion with the patient, the team preferred enterotomy with polypectomy and periodic colonoscopic evaluation, the recommended management is perineal recto-sigmoidectomy.

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