

Prolapsed Polyp through Anus Unveiling Sinister Pathology: An Uncommon Presentation of Polyposis Syndrome

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Abstract

Adenomas are defined as tumours of glandular tissue protruding into the lumen of a hollow organ. They are divided into nonpedunculated (sessile) and pedunculated. Adenomatous polyps are classified as villous, tubular, and tubulovillous. Adenomas with Villous features have more tendency to develop neoplasia or dysplasia as compared to others. We are presenting a unique case of prolapsed rectal polyps through anus which on further evaluation revealed hundreds of polyps through large intestine. These polyps were of tubulous and tubulovillous kind with dysplasia occurring at a very young age. Prolapsed polyps should not be considered solitary unless proved otherwise. Colonoscopy should be must for a patient presenting with rectal polyps especially with large size, villous component, and dysplasia. Management of these polyps and evaluation for familial syndromes is crucial as these are premalignant.

Keywords: Adenoma; Polyp; Villous; Tubular; Tubulovillous Adenoma; Dysplasia; Neoplasia

Introduction

Polyp is derived from the word polypous (Greek), meaning 'morbid lump.' Polyp is defined as any tumorous tissue protruding into a hollow organ like the intestine, genitourinary tract, or respiratory tract. Colorectal polyps can be divided into neoplastic and non-neoplastic polyps (inflammatory, hamartomatous and hyperplastic polyps [1].

The most common polyps in the colon are Adenomatous polyps accounting for 60-70 % of all colonic polyps. Adenomatous polyps are asymptomatic but can present with bleeding, prolapsed mass through the anus, and obstruction. Colonic polyps are divided into tubular, villous, or tubulovillous. Villous adenomas are identified by finger-like or leaf-like epithelial projections. Villous adenomas have more

than 75% of these characteristics whereas tubulovillous have 25 - 75%. Adenomas with Villous features in adenoma is associated with increased chances of neoplasia and dysplasia compared to other types of adenoma [2,3].

We present a rare case report of prolapsed polyps through anus which on further evaluation found to be hundreds of polyps.

Case Report

A 30-year gentleman presented with prolapsed mass per anus in the emergency department. He gave a history of mass protruding through the anus and intermittent bleeding. On investigation Haemoglobin 9.5 gm%, TLC 5600, urea/creatinine 20/0.5, LFT normal. On examination, an irregular pedunculated, fragile bright red coloured mass measuring about 2 x 2 cm which bleeds on touch was seen. Another mass of size 1 x 1 cm is also noted on straining (Figure 1).



Figure 1: Prolapsed polypoidal mass.

Both polyps were removed and sent for histopathological examination. He was further evaluated with colonoscopy because of multiple polyps in the rectum. Colonoscopy was suggestive of multiple polyps of variable sizes in the ileum and large intestine from the caecum to rectum (Figure 2).

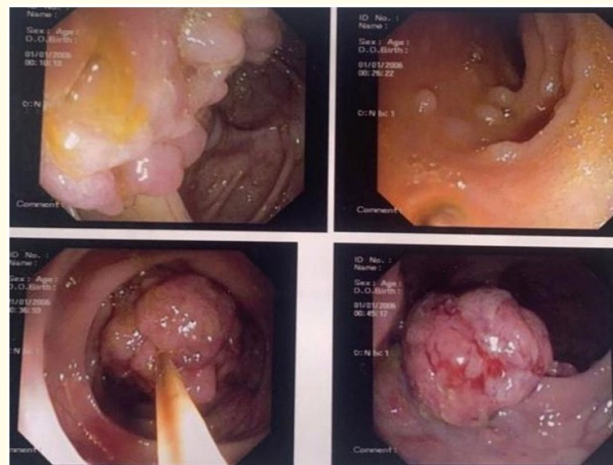


Figure 2: Colonoscopy showing multiple polyps in rectum, ascending colon, caecum, ileum. Small polyps are seen in descending colon, and transverse colon.

Biopsy from polyps suggested low-grade dysplasia Tubulovillous adenoma with focal malignant changes. (Figure 3).

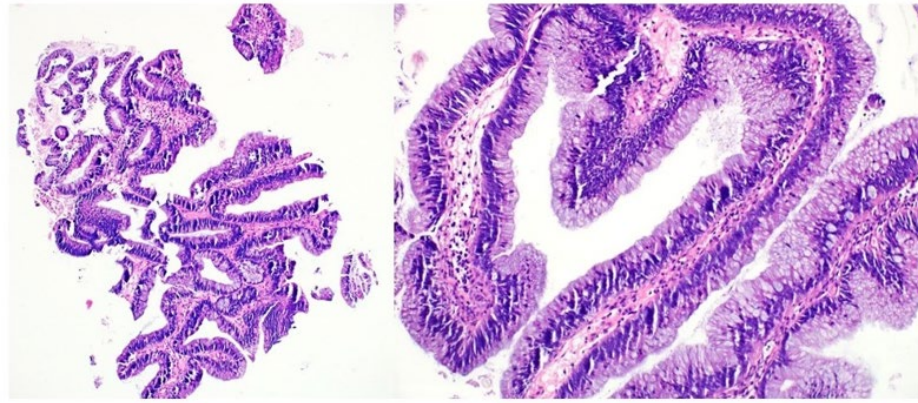


Figure 3: Low grade tubulovillous adenoma with focal malignant change a. 10 x, b. 40 x.

CT scan abdomen showed polyps in the large intestine from the caecum to the rectum. He is planned for proctocolectomy in view of pan colonic polyps with high risk of malignancy.

Discussion

Colon polyps are rare in the younger population, present in only one to four percent of 20 to 30-year-olds. Adenomatous polyps are tumors of glandular tissue protruding into the lumen of a hollow organ. They can be classified as nonpedunculated (sessile) and pedunculated [4,5].

Environmental and genetic factors are implicated in the formation of colorectal polyps. Most polyps in the colon are sporadic, although genetics plays a predominant role in subsequent colon cancer [6].

Familial adenomatous polyposis (FAP) is an autosomal dominant genetic disorder caused by a mutation in the tumor suppressor APC gene located on chromosome 5q. It results in the development of numerous polyps (more than 100) throughout the colon and rectum. Polyps develop at an early age and, if untreated, can develop into colorectal cancer until the patient reaches forty years of age. FAP only accounts for around 1% of colon cancer cases, although the prognosis is grave, and serial follow-up is a must.

Adenomas of size 1 - 2 cm have a 5% risk of malignancy, whereas polyps larger than 2 cm have a 10 - 20% risk. Villous tumors and larger polyps (more than 2 cm) are more likely to transform into malignant tumors. Adenomas with dysplasia are likely to develop into adenocarcinoma. An association between *Streptococcus bovis* and rectal villous adenoma is also advocated in the literature. Patients with irritable bowel syndrome are also at a higher risk of developing adenomas and colorectal cancer. Other predisposing factors include a high-fat diet, spicy food, high alcohol intake, and smoking. Villous adenomas account for 5 to 15% of all adenomas. Cytological features of low-grade dysplasia include crowded, pseudo-stratification to early stratification of spindled or elongated nuclei that occupy the basal half of the cytoplasm [7].

Cytologically high-grade dysplasia shows an increased nucleus-to-cytoplasmic ratio and a more significant loss of polarity. Other features different from low-grade dysplasia are significant pleomorphism, rounded nuclei, atypical mitosis, and a significant loss of polarity [8,9].

Colonic or rectal adenomatous polyp (> 2 cm) when present below 50 years of age is a rare presentation. In this case, the patient presented with irregular pedunculated, fragile bright, red-colored masses that bled on touch. On further evaluation, multiple polyps were found from the cecum to the anal canal, of varying sizes, and most of the predisposing factors were absent, making it a perfect case for polyposis colonic syndrome. Most of the polyps were of a villous and tubular structure, not penetrating the muscularis layer, although they showed a varying degree of dysplasia. Timely diagnosis and colectomy in these patients can be lifesaving. Evaluation for other associated malignancies is paramount, and strict follow-up should be ensured [10].

Conclusion

Prolapsed polyps should not be considered solitary unless proved otherwise. Colonoscopy should be must for a patient present with rectal polyps especially with large size, villous component, and dysplasia.

Conflicts of Interest

None.

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