Case Report

Giant Villous Adenoma: A Rare Case of Colorectal Adenoma that Mimic Colorectal Cancer

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Colorectal cancer being the 4th most common cause of cancer death in which most arise from a preexisting adenomatous polyp. Among the various adenomas giant villous adenoma (GVA) is less common. We came across a 65 years female with intermittent per rectal mucus discharge for last 10 years & intermittent fresh, painless, scanty per rectal bleeding along with weakness and fatigue for last 5 years. No members of her family had been suffering from colorectal malignancy. DRE revealed irregular gritty feelings of rectal mucosa starting 2cm from anal verge and the examining fingertip was blood tinged mixed with mucus. On proctoscopic examination the accessible rectum was studded with thousands of polyps with granular appearance, with variable sizes and there was mucus mixed blood within the rectum. Colonoscopy reveals- polypoid lesion starting 2 cm from anal verge & extends up to 20 cm with granular & velvety appearance. Biopsy was done 2 times for suspicious lesion and histopathology reveals Tubulovillous adenoma with dysplasia. However as clinical suspicion of an adenocarcinoma was strong but histopathological report of colonoscopic biopsy was contradictory, Surgery (Intersphincteric ultra-low anterior resection with coloanal anastomosis with covering ileostomy) was done. Resected specimen was sent for histopathological study & it reveals- villous adenoma with low grade dysplasia.2 months later reversal of ileostomy was done & now the patient is under regular follow up and now she is asymptomatic.

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Key words: Colorectal cancer, Villous adenoma (VA), Giant villous adenoma (GVA), Ultra low anterior resection (ULAR)

Introduction

Colorectal cancer is an important cause of death. In most cases it starts from adenomatous polyp. The prevalence of adenomatous polyps of the colon and rectum was reported in approximately 25% of the population aged over 50 years[7]. From a recent study it was found that the prevalence in average risk populations of colonic adenomas, malignancy, non-advanced adenomas, & advanced adenomas are at 30.2%, 0.3%, 17.7%, and 5.7%, respectively[8]. The giant villous adenomas with severe dysplasia are mostly concentrated in the distal colon (left colon and rectum), in particular in the descending-sigmoid part[9]. Often it is very much difficult to differentiate from an infiltrating adenocarcinoma based on clinical presentation and radiological investigations. These lesions however can be suspected in an elderly patient if a colorectal surgeon is aware of it & if they cannot be removed without an increased risk of perforation, surgical procedures are required. Here we will present a case of a giant villous adenoma of the rectum & lower sigmoid which was managed successfully by (ULAR) ultra-low anterior resection & literature review was done in terms of its malignant potential & its optimum surgical management.

Case Report

Mrs. Hamida Khatun, 65 years Muslim house wife got herself admitted into SU-1, Mymensingh Medical College Hospital (MMCH), Mymensingh, Bangladesh, with the complaints of intermittent per rectal mucus discharge for the last 10 years which gradually increases & now it persists almost all the day and even at night. She used to defecate 1 to 2 times in a day; the stool was semisolid, mixed with mucus. She also complained of frequent weakness and fatigue for the last 5 years.

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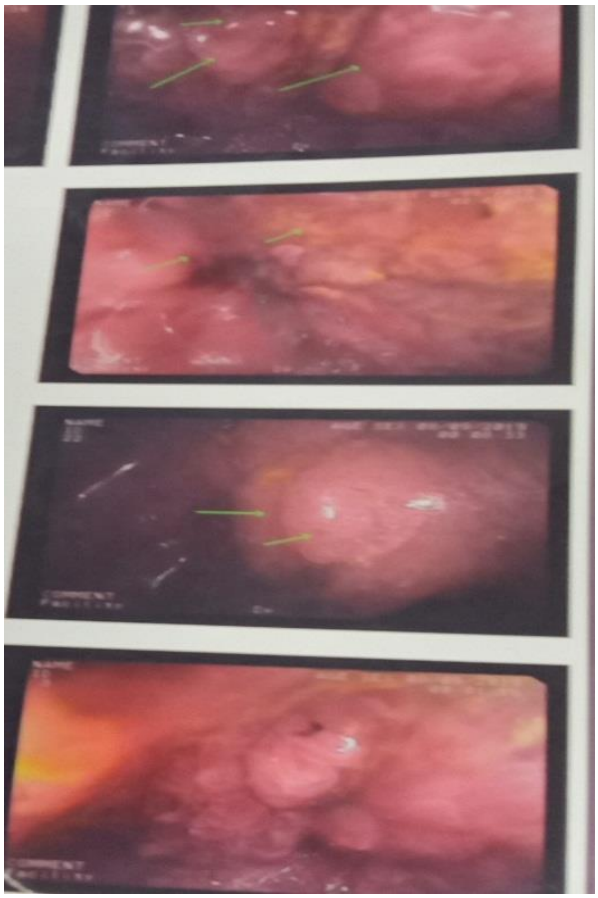
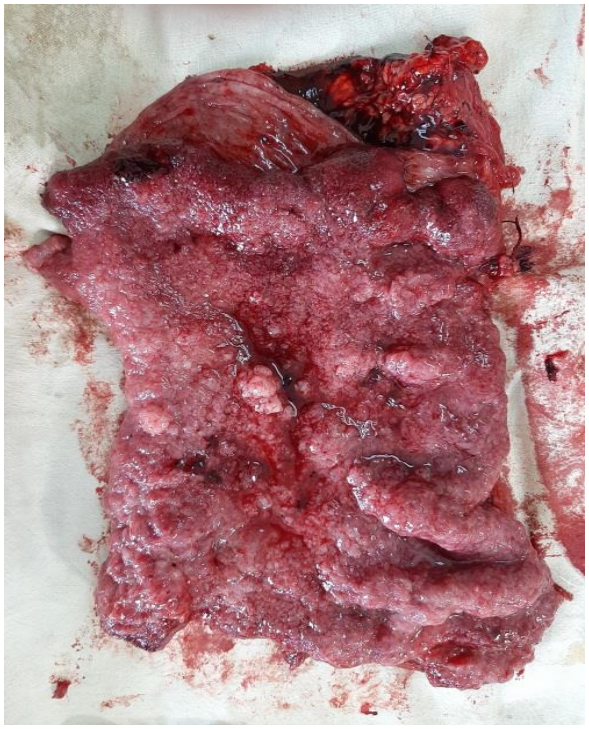
For last 1.5 years she noticed intermittent fresh, painless, scanty per rectal bleeding. Sometimes it was only blood and mucus, sometimes only few drops of blood during straining and sometimes there was blood streak on stool. She had history of anorexia and significant weight loss. No members of her family had been suffering from colorectal malignancy. Her bladder habit was normal. This patient was mildly anaemic. Vital parameters were within normal limit. DRE revealed wet and excoriated perianal skin with irregular gritty feelings of rectal mucosa which starts 2cm from anal verge and mildly tender & upper limit can't be reached. The examining fingertip was tinged with blood & mucus. On proctoscopic examination the accessible rectum was studded with thousands of polyps with granular appearance, variable in size and there was mucus mixed blood within the rectum. All other systemic examinations were within normal limit. Colonoscopic findings were- Rectal polyposis starts 2cm from anal verge and extends up to 20cm with suspected rectal growth. Colonoscopic biopsy was done 2 times for suspicious lesion. Biopsy reveals Tubulovillous adenoma with high grade dysplasia in one report and Tubulovillous adenoma with low grade dysplasia in another report**.**

Esophagogastroduodenoscopy: reveals normal study. She had electrolyte imbalance & the report was: Na+=135 mmol/l, K+=2.7mmol/l, Cl_=91 mmol/l. Liver Function Test reveals normal study. Serum CEA: 1.4ng/ml, Serum CA-19-9: 2.1u/ml. However as clinical suspicion of an adenocarcinoma was strong but colonoscopic biopsy was contradictory to clinical diagnosis, Surgery (Intersphincteric ultra-low anterior resection with coloanal anastomosis with covering ileostomy) was done. Grossly a 20 centimeters (cm) long resected specimen was received with inner mucosal surface is carpeted by innumerable polypoid adenomas which involve almost total surface of the tissue except 2 cm area of proximal margin. Histopathology was done from multiple sections of the specimen & it reveals villous adenoma with low grade dysplasia. Based on clinical findings & histopathology report the final diagnosis was giant villous adenoma with low grade dysplasia. 2 months later reversal of ileostomy was done & now the patient is under regular follow up & she is asymptomatic.



Colonoscopic picture



Resected specimen following surgery

Discussion

The 'villous adenoma' of the rectosigmoid is a rare condition. It was first described by Que'nu and Landel in 1899. They have found a very large broad based rectal tumor & it was associated with secretory diarrhoea[6]. In the published literature it was found that, the proximal colonic adenomas are usually polypoidal, and the distal colonic adenomas are usually sessile, but this is not mandatory that it is always true. There are 3 types of colonic polyp. Among them villous adenoma is the least common (5-10%). Usually the villous adenomas are commonly 2-4 cms in size, rarely they can be more than 5 cm in size and even can be up to 18 cms in size [GVA][1,2,3]. Giant polyposis causing intestinal symptoms have also been described in inflammatory bowel diseases (IBD), especially in ulcerative colitis[4]. The usual age of presentation of GVAs are usually in the fifth decade and often found secretory diarrhoea with electrolyte imbalance[1,2]. Per rectal bleedings are rarely seen[2]. Rare reports of GVA presenting as McKittrick–Wheelock syndrome are there, characterized by large volume diarrhoea, severe electrolyte dysfunction and pre-renal acute renal failure[3]. Occasionally irreducible rectal prolapse can be a complication of GVA. The index case presented with mucus discharge almost all the day which was mixed with stool and blood with fatigue & anorexia. Colonoscopic findings were very much suspicious of malignancy. No clinical, colonoscopic and radiological features of IBD were there. It is usually not possible to differentiate GVA from carcinoma by using radiological imaging & conventional CT scan is non-specific to differentiate it from carcinoma. Magnetic resonance imaging (MRI) and CT colonography are considered superior to CT scan[2]. It is thought that in case of villous adenoma especially the prostaglandin E2 induces goblet cells to secrete excess amount of mucus & as the GVA which is usually situated more distal part of the colorectum, there is very less absorptive mucosa beyond the lesion ultimately leads to diarrhoea and there is sodium and potassium loss[5]. If the lesion does not infiltrate the rectal wall & if there is no edema and rigidity, then usually there is no intestinal obstruction in case of GVA[2]. But as there is malignant potentiality of any adenomas of gastrointestinal tract, it should be removed endoscopically if possible. However GVA is difficult to remove endoscopically and requires surgical removal. Trans-anal endoscopic microsurgery is an option, but there is chance of stenosis in case of circumferential GVA, like the index case[5]. Here we have done ultralow anterior resection as the lesion is large, circumferential, & involves low rectum with anal canal.

Conclusion

Giant villous adenoma is a very rare condition in the GI tract especially in the rectum. Sometimes it is very difficult to differentiate it from adenocarcinoma clinically and radiologically. As giant villous adenomas are difficult for endoscopic removal and malignant potential is not known, surgery offers safe and effective management of these lesions.

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