Case Report

Colitis Cystica Profunda Mimicking Adenocarcinoma

Abstract

Colitis cystica profunda is a rare benign condition of the rectum and colon and is characterized by benign intramural mucous containing glands. It can be easily misdiagnosed as invasive adenocarcinoma clinically as well as on imaging modalities. The definite diagnosis can only be made on histopathology. We present a case of 50-year-old male who came with the complaints of intermittent abdominal pain and abdominal distension.

Keywords: *Adenocarcinoma, colitis cystica profunda, colon, rectum*

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Introduction

Colitis cystica profunda (CCP) is an extremely rare benign lesion of the large intestine. It is commonly seen in the rectum and sigmoid colon but can also be seen anywhere throughout the colon.[1] It shows male predilection and is characterized by submucosal mucin filled cyst lined by benign epithelium. Although the cause of this lesion is still not clear, it occurrence always poses difficulty as it closely mimic adenocarcinoma both clinically as well as on imaging, and can lead to unnecessary radical surgery and aggressive management.[1-3] The diagnosis of this condition require a high degree of suspicion and adequate biopsies to avoid unnecessary aggressive surgery.

Case Report

A 50-year-old male came to the outpatient department with complaints of intermittent abdominal pain and distension since 7–8 months. He started developing intermittent abdominal bloating and distension 7–8 months back that gradually was followed by pain in abdomen which was mild in intensity, colicky, generalized not associated with any aggravating and relieving factor. He also complained of altered bowel habits in this period. However, he did not give any history of malena, diarrhea, and hematuria. The patient is a known case of abdominal Koch's and had completed treatment. The patient had no significant family history of bowel pathology. Computerized Tomography of the abdomen and pelvis revealed a circumferential thickening of caecum and distal ileum along with dilatation of distal ileum [Figure 1] suggesting malignancy. Right hemicolectomy was done. On gross examination, the right hemicolectomy specimen showed a focally thickened wall which was grayish-white firm on cut surface [Figure 2]. No ulceration, tubercles or lymph nodes were identified. Microscopic examination of the thickened gray white area was done. It revealed entrapped glands in the muscularis propria [Figure 3]. The glands were cystically dilated, contained mucin and were lined by bland appearing columnar cells having round to oval nuclei and moderate amount of eosinophilic cytoplasm [Figure 4]. Extracellular mucin pools were also seen. However, no evidence of any dysplasia or malignancy. The patient tolerated the procedure well and follow-up was uneventful.

Discussion

CCP is a very intriguing benign lesion of the colon. Stark[4] first described this lesion in an autopsy study of two patients. Later on, Virchow[5] introduced the term CCP in a case report of multiple polypoidal cystic submucosal lesions. The most common site of CCP is rectum and sigmoid colon. The etiology of this condition is still not known, but proposed theory is of congenital origin. It is also seen with other acquired conditions such as solitary rectal ulcer, inflammatory bowel disease, diverticulitis, local rectal trauma, and rectal prolapse. Its uncommon

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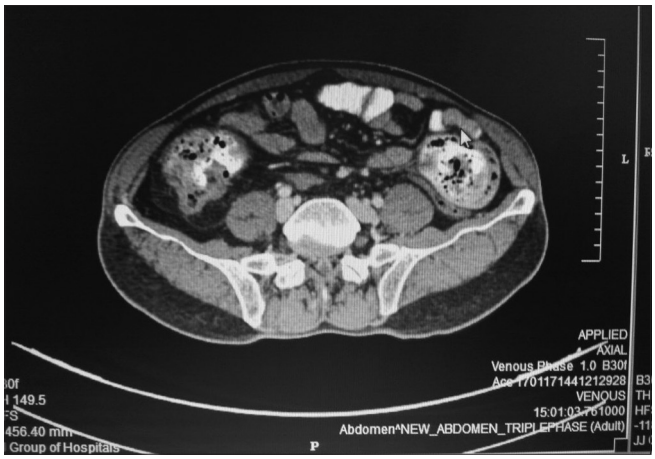

Figure 1: Computerized Tomography of the abdomen and pelvis revealed a circumferential thickening of caecum and distal ileum along with dilatation of distal ileum

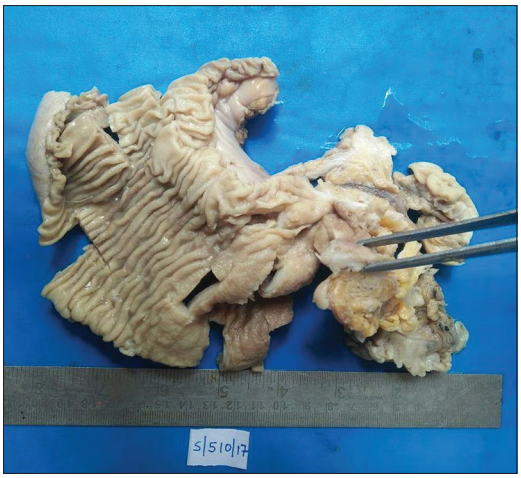

Figure 2: Right hemi colectomy specimen showed a focally thickened wall, grayish-white firm in consistency

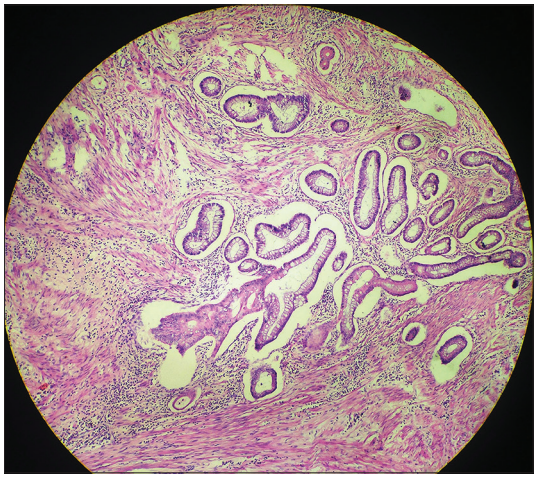

Figure 3: Microscopic examination revealed entrapped glands in the muscularis propria

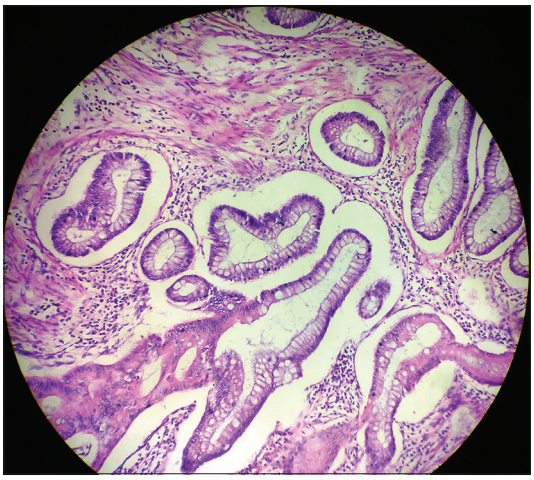

Figure 4: The glands are cystically dilated, contained mucin and were lined by bland appearing columnar cells having round to oval nuclei and moderate amount of eosinophilic cytoplasm

association with reported cases of adenocarcinoma has made it mandatory to look and search thoroughly to rule out such possibilities.[1,6]

On gross examination, the colonic wall appears thickened and shows cyst in the submucosa.[1] On histopathology, mucin filled cysts are seen in the muscularis propria which can be localized forming a polypoidal lesion or can be diffusely distributed through the length of the colon.[7] In both lesions mucosal ulceration and inflammation can be seen. The localized form is usually seen in solitary rectal ulcer and rectal prolapse,[1] whereas diffuse form is associated with colitis, radiation, and infective colitis.[6,7] Patients may be asymptomatic or may present with symptoms of rectal bleeding, mucus discharge, tenesmus, proctalgia fugax, and altered bowel habits.[1,2,8] Endoscopy reveals a polypoidal lesion covered by unremarkable or ulcerated mucosa.[1] Endoscopic anorectal ultrasound helps in suggesting the diagnosis as it shows hypoechoic signal in the submucosal layer without deeper infiltration. Computerized Tomography and Magnetic resonance imaging show a noninfiltrating submucosal cystic lesion with some loss of perirectal fatty tissue. Histopathology is the gold standard to differentiate malignancy from this benign lesion.[1] The differential diagnosis and close mimics of this condition are invasive adenocarcinoma and endometriosis.[9] However, the bland cytological features of the entrapped benign glands can be easily distinguished and help to rule out malignancy.[9] Endometriosis can be differentiated by the presence of small round tubular glands accompanied by endometrial stroma. Treatment is usually conservative and surgical intervention is reserved for those cases which show no improvement in the symptoms and are associated with rectal prolapse.[1] Operative options include transanal excision of CCP, rectal mucosal excision (Delorme's Operation) perineal rectosigmoidectomy (Altermeier's operation) with coloanal anastomosis, stapled transmural resection of rectum (STAAR procedure), and abdominal approach laparoscopic ventral rectopexy.[1,2,10]

Conclusion

Although extremely uncommon, this entity should be kept in mind as it mimics adenocarcinoma both clinically as well as on investigative modalities. Furthermore, the treatment modalities and outcome totally changes in both the lesions.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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