Rectal Diverticulum Presenting with Obstructed Defecation: A Case Report

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Abstract

Diverticular disease of the colon is a common condition in western and developed countries. Distal colon is the mainly stricken part, being the sigmoid colon affected in up to 70% of the patients. The occurrence of rectal diverticula is very rare, with only sporadic reports in the literature since 1911. Symptomatic rectal diverticula are encountered even less frequently. Most patients are diagnosed incidentally, inflammatory processes may have developed at the time of the diagnosis .Treatments of these complicated events range from conservative treatments to major surgical interventions. Here we present a patient who was diagnosed with rectal diverticulum causing constipation and difficult defecation.

Keywords: Rectal diverticula, Rectal prolapse, Outlet obstruction.

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Introduction

Diverticular disease is largely a process involving the sigmoid colon, followed by the ascending colon and cecum.(1) Rectal involvement is extremely rare, Although the true incidence of rectal diverticula is difficult to estimate because of the rarity, rectal diverticula comprise 0.1% of the cases of colonic diverticular disease which have been reported(4).

Here We present a case of isolated rectal diverticulum complicated with rectal outlet obstruction.

Case Repot:

A 73 year old lady presented to the outpatient clinic complaining of a mass protruding from the anal area on defecation. It is increasing through the last 6 months. it is associated with constipation that started one year prior to this complaint and a noticeable difficulty on defecation.

There was no abdominal pain, neither weight loss nor abdominal distention nor vomiting, and there was no bleeding per rectum nor pain on defecation no family history of malignancy was noticed.

The physical examination of the patient was unremarkable except for a mucosal flap over the rectum on digital rectal examination no anal hemmorhoids or fissure were noticed.

Abdomen and pelvic CT scan revealed no

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abnormality in the abdomen or bowel Colonoscopy was normal without showing showed the diverticulum ostium into neither the rectum nor the colon.

MRI defecogram showed normal position of the anorectal junction, nodular thickening of the anterior rectal wall associated with two wide neck diverticulas ,the largest arising from the left anterior aspect and is air filled measured 4.5x4 cm and another one arising from left posterolateral aspect measuring 3x1.5 cm and is contrast filled. (Figure 1 and 2)

The patient was started on stool softeners and laxatives with a very good improvement on those medications and showed resolution of her symptoms.

Discussion

A diverticulum is the sac of an abnormally protruding bowel wall.[4] diverticular disease of the colon is a common condition in western and developed countries. Its prevalence increases with age, being present in more than 50% of population aged over 80 in some series. Distal colon is the mainly stricken part, being the sigmoid colon affected in up to 70% of the patients, chiefly diagnosed by colonoscopy or barium enema.[1]

Rectal diverticula are typically situated along the lateral aspects of the rectum, since the complete longitudinal muscular layer of the rectum is thicker anteriorly and posteriorly compared to the lateral aspects of the wall[9].

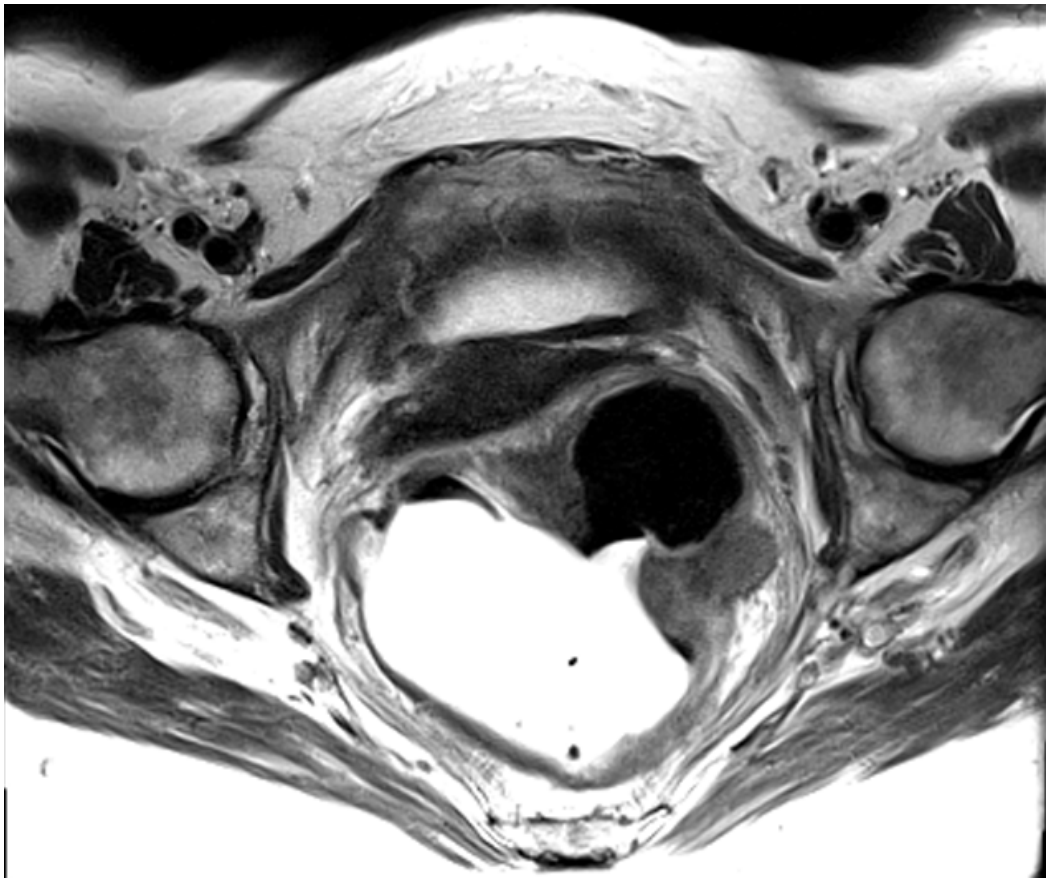

Figure 1: A diverticulum noticed in left anterior aspect and is air filled measured 4.5x4 cm

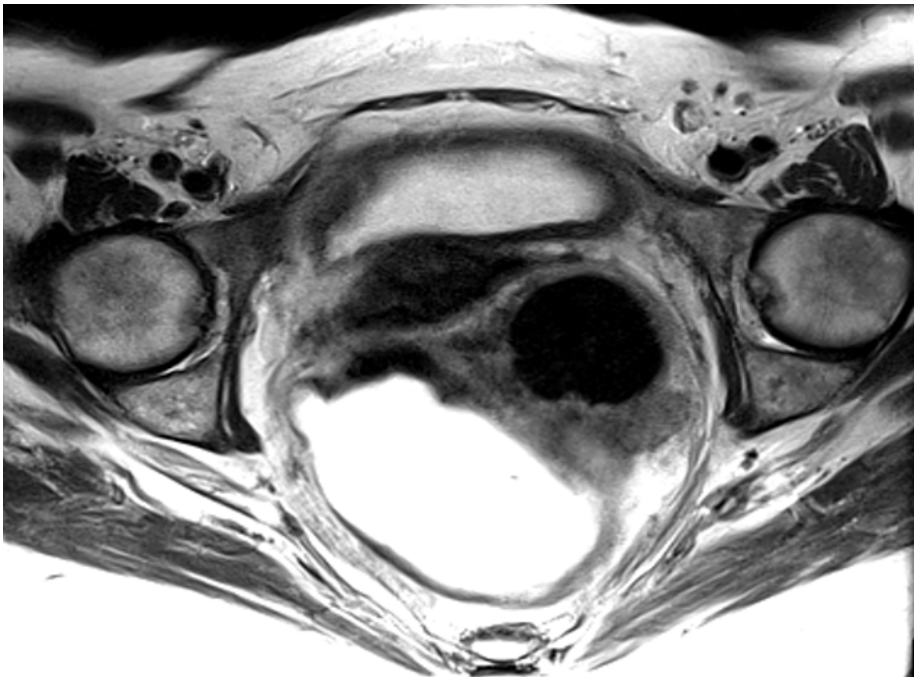

Figure 2. smaller diverticulum arising from the right anterolateral aspect which is contrast filled measured 13x13 mm

Additionally, Most of the rectal diverticula, as opposed to the colonic diverticula, are true diverticula[4].

including all layers of the colonic wall as opposed to the more pseudodiverticula of the colon, suggesting the possibility that they occur at areas of focal weakness in the rectal wall caused by congenital or acquired origin[4].

Most patients with rectal diverticula are diagnosed by accident, as the malady is asymptomatic. Such uncomplicated rectal diverticula are clinically insignificant. However, complications associated with rectal diverticula can include rectal diverticulitis with perforation and abscess formation, diverticulitis of the midrectum, and a prolapsed rectum from an inverted rectal diverticulum. Postinflammatory stenosis of the rectum, a rectal-vesical fistula, and an enormous fecaloma within a rectal diverticulum have also been reported as complications of rectal diverticula. Erroneous diagnosis of carcinoma can prompt abdominal perineal resection[2].

Cases involving complicated rectal diverticula are extremely rare. But when they occur, they usually present with rectal pain and bleeding, or inflammatory lesions such as abscess formation[2].

Colonoscopy and barium enema are very important diagnostic modalities for diverticular disease. The detection of some diverticula will be more missed by endoscopy than barium study[4].

Two theories for the low incidence of rectal diverticula have been described. First, the muscle fibers of the taenia coli spread

outward, thus surrounding the rectum and protecting it against intraluminal pressures. Secondly, less constant internal pressure is exerted on the rectum by accumulated feces and by a lower peristaltic activity as compared with the sigmoid colon. The causes of rectal diverticula remain unknown; possible predisposing factors include congenital anomalies, primary muscle Atrophy, or the absence of supporting structures.[3] The occasional development of iatrogenic rectal diverticula by surgical trauma has been recently reported[4].

Usually rectal diverticula need no surgical treatment since most cases are asymptomatic. Periodic follow-up is recommended due to possible metaplastic and posterior malignancy changes in the mucosa . Surgical intervention is reserved to symptomatic diverticulum or complications such as ulcers or abscesses, or in cases when rectal carcinoma is suspected[5].

The approach depends on the gravity or extension of the disease. Local drainage, diverticula invagination and diverticulectomy are preferred in single or located complications. Aggressive surgical procedures as retosigmoidectomy or abdominoperineal resection are reserved for extent complicated disease or when malignancy is recognized[1][5].

Our case showed that there is a role for conservative management in rectal diverticulum and that such a rare entity of colonic diverticulum can present with symptoms of difficult and obstructed defecation.

Conclusion

Rectal diverticula are rare and can be easily missed by proctoscopy. They typically require no treatment because they are asymptomatic in most patients.

Surgical intervention is only necessary in such patients with complicated events. Various approaches had been described in the management of different complications. Correct diagnosis preoperatively is required to prevent unnecessary surgery.

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عرض رتج المستقيم مع إعاقة الإخراج: تقرير حالة

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الملخص

الرتج القولون حالة شائعة في البلاد الغربية والبلدان المتقدمة النمو. القولون القاصي هو الجزء المصاب، عادة القولون السيني هو المتضررة ويصل إلى 70% المرضى. حدوث رتوج المستقيم نادرة جداً، مع تقارير متفرقة منذ عام 1911. رتوج المستقيم تصادف أعراضاً قليلة. ويتم تشخيص معظم المرضى صدفة، وقد تطورت عمليات التهابات في وقت التشخيص. علاجات هذه معقد وتتراوح العلاجات بين التحفظية والتدخلات الجراحية الرئيسة. نقدم هنا مريض الذي تم تشخيص مع رتج المستقيم يسبب الإمساك، وصعوبة الإخراج.

الكلمات الدالة: رتوج ريكتال، انسدال المستقيم، الانسداد.