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CASE REPORT / OLGU SUNUMU

Solitary rectal diverticulum: A case report

Soliter rektal divertikül: Olgu sunumu

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ABSTRACT

Rectal diverticulas are very rare and most of patients with rectal diverticula are diagnosed incidentally. Inflammatory processes may have developed at the time of the diagnosis. Here we report a case of rectal diverticulum which was developed after stapled transanal rectal resection procedure. Abdominal magnetic resonance imaging revealed a giant diverticulum of the rectum. A fecaloma is removed from rectum endoscopically. *J Clin Exp Invest 2013; 4 (4): 506-508*

Key words: Magnetic resonance imaging, rectal diverticulum, stapled hemorrhoidopexy

ÖZET

Rektal divertiküller çok nadirdir. Hastaların tanısı çoğunlukta tesadüfen ve inflamatuar bir süreci takiben konur. Çalışmada; Stapler ile transanal rezeksiyon sonrası rektal divertikül gelişen bir hasta taktim ettik. Abdominal Manyetik Rezonans görüntüleme'de rektumda büyük bir divertikül tespit edildi. Yapılan rektosigmoidoskopide; rektumda dar bir ağzı olan ve fekaloidle dolu rektal divertikül tespit edildi. Endoskop eşliğinde, tespit edilen fekalom parçalanarak rektumdan dışarıya alındı.

Anahtar kelimeler: Manyetik rezonans görüntüleme, rektal divertikül, stapled hemoroidektomi

INTRODUCTION

Diverticulum disease is the most common pathology, which affects large intestine and is common in society [1]. Frequency of the disease increases by age and its incidence is 30% in population over the age of 60 years [2]. Rectal diverticulum is a rarely encountered disease and generally its diagnosis is established incidentally [3]. Stapled Hemorrhoidopexy includes concurrent excision and stapling of circumferential column of the mucosa and submucosa in the insensitive area above the dentate line, which results in reduction of mucosal prolapse [4]. Recently, rectal diverticula have been reported as surgical complication after the stapled transanal rectal resection (STARR) procedure [5]. In this paper, our purpose is to introduce a rectal diverticulum case, which was developed long after Stapled Hemorrhoidopexy.

CASE REPORT

Stapled Hemorrhoidopexy was performed to a 55-year-old male patient who has Hemorrhoid complaints for 5 years and pain and tenesmus complaints as well as constipation complaint for more than 1 year. In rectal examination a mass, nearly 4x4 cm diameter was determined on posterior rectum wall. Magnetic resonance imaging (MRI) showed rectal diverticulum 5x4 cm in diameter on rectum posterior wall of pelvic (Figure 1). On rectosigmoidoscopy, rectal diverticulum with a narrow opening, which is full with fecaloma was determined on proximal of Linea Dentata of rectum (Figure 2). A fecaloma is removed from rectum endoscopically.

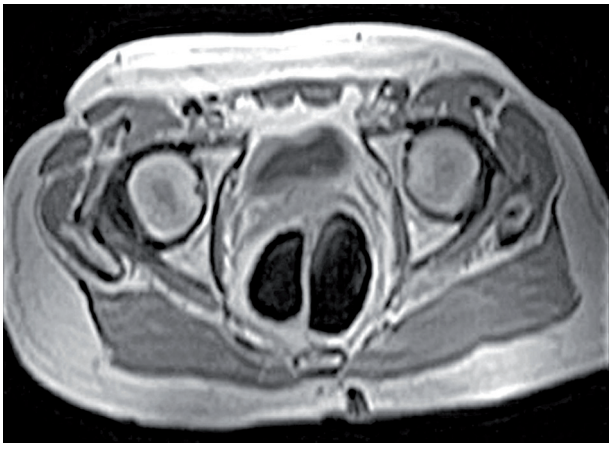

Figure 1. Double lumen view can be seen on MRI incision

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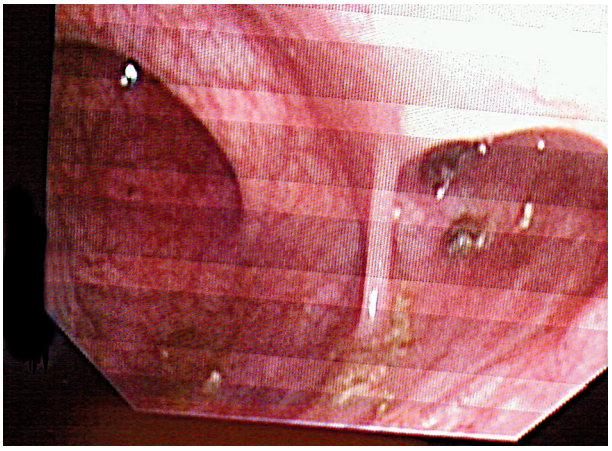

Figure 2. Endoscopic appearance of the rectal diverticulum

DISCUSSION

Diverticular disease is usually first determined on sigmoid colon and following this process, it is also be observed on ascending colon and cecum. However, rectal diverticulum is scarce and frequency of the disease is less than 1% [4, 6]. Scarcity of rectal diverticulum is associated with two theories. Firstly, the muscle fibers of the taenia coli spread outward. Hence, they surround the rectum and fortify it against intraluminal pressures. Secondly, in comparison with the sigmoid colon [7], accumulated feces and a lower peristaltic activity exert lesser constant internal pressure on the rectum.

The factors, which contribute to rectal diverticula formation are not totally comprehended. Probable predisposing factors involve congenital anomalies such as weakness in the circumferential muscle surrounding the rectum, primary muscle atrophy or the absence of supporting structures like the coccyx. Relaxed rectal-vaginal septum, recurrent fecal impactions exerting pressure and causing distention of the rectum and pelvic trauma or infections that result in the weakening of the rectal wall constitute other acquired reasons [8, 9].Furthermore, Plavsic et al.[10] reported that 2 of 27 patients who have scleroderma had rectal diverticulosis without other diverticula in the rest of the colon. Loss of colonic haustrations has been reported in scleroderma and probably results in the development of colonic diverticula [11]. Rectal diverticulas are typically located along the lateral aspects of the rectum as the total longitudinal muscular layer of the rectum is thicker anteriorly and posteriorly in comparison with the lateral aspects of the wall [9]. Moreover, most rectal diverticulas described so far involve all layers of the colonic wall in opposition to pseudo diverticulas of the colon. It is suggested that the probability that they take place at areas of focal weakness in the rectal wall brought about by congenital or acquired origin [12].

Most patients who have rectal diverticula are diagnosed incidentally and they are also asymptomatic. But, rectal diverticula may become inflated with impacted feces and progress to abscess and perforation. Several complications that are connected to rectal diverticula contain perforation and abscess, a prolapsed rectum from an inverted rectal diverticulum, rectal stenosis, rectovesical fistula and misdiagnosis as carcinoma [13]. Drainage of the abscess, diverting colostomy, resection of the diverticular mass or abdominal perineal resection of the rectum constitutes surgical treatment of the complicated rectal diverticula [14].

In conclusion, rectal diverticulum is a rare disease with unknown etiology. However, it is not possible to claim that stapling hemorrhoidectomy is an etiological reason for acquired diverticulum. Hence, multicenter studies that are composed of long series are necessary for this issue.

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