

Chemotherapy or radiotherapy are not effective in this type of tumors, and there is no evidence of any type of benefit with imatinib mesylate or other drugs that have demonstrated results of improved survival in the case of other high-risk or advanced gastrointestinal stromal or mesenchymal tumors.⁸

Tumor size and stage, cell proliferation rate and the state of the resection margins and tumor capsule are the most important prognostic factors in this type of tumors.⁹ A strict post-operative follow-up is necessary because 30% of cases may present recurrence or metastasis.⁹ Overall 5-year survival is estimated at approximately 50% in high-risk patients.¹⁰

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Marcos Bruna*, Enrique Artigues, Miguel Ángel Lorenzo, Antonio Melero, José Puche

Servicio de Cirugía General y del Aparato Digestivo, Consorcio Hospital General Universitario de Valencia, Valencia, Spain

*Corresponding author.

E-mail address: drbruna@comv.es (M. Bruna).

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Solitary Rectal Diverticulum. A Case Presentation

Divertículo rectal solitario. Presentación de un caso

Colonic diverticulosis is a common disease. However, rectal diverticula are considered extremely rare, and there are few reports in the literature. The cause of rectal diverticula is unknown and the incidence is less than 0.07%–0.08% of the total of colorectal diverticula. We present the case of a 50-year-old patient diagnosed with a solitary rectal diverticulum as an incidental finding.

The patient is a 50-year-old man, with a prior history of a renal transplant in 2007 for chronic renal failure and diabetes mellitus treated with oral antidiabetic medication.

In September 2009 he consulted for asthenia of 2 month duration. A blood test revealed hemoglobin levels of 10 mg/dl and hematocrit of 31%. A colonoscopy was performed and at 8 cm from the anal verge an orifice in the mucosa was observed, that seemed to correspond with a rectal diverticu-

lum. An abdomino-pelvic CT scan was performed and a 3-cm cavity was observed that communicated with the rectal lumen through a narrow opening at approximately 8 cm from the anal verge that was compatible with a rectal diverticulum (Fig. 1a and b). The patient continues follow-up visits at the outpatient clinic and remains symptom-free.

Colonic diverticulosis is a very common disease, and the prevalence is approximately 2% in patients younger than 30, but can rise to 50% in patients over 50 years of age.¹ However, rectal diverticula are extremely rare, with an estimated incidence of less than 0.07%–0.08%.^{2,3} Currently, prevalence has risen, probably due to surgical iatrogenic lesions caused by stapled hemorrhoidopexy or transanal rectal resections for mucous prolapse.⁴ The first case described in the literature was in 1911,⁵ and since then only 40 cases have been reported.³

Causal factors for the formation of rectal diverticula are not clear. They are caused by focal weak areas in the rectal wall, due to either congenital or acquired factors. Among the

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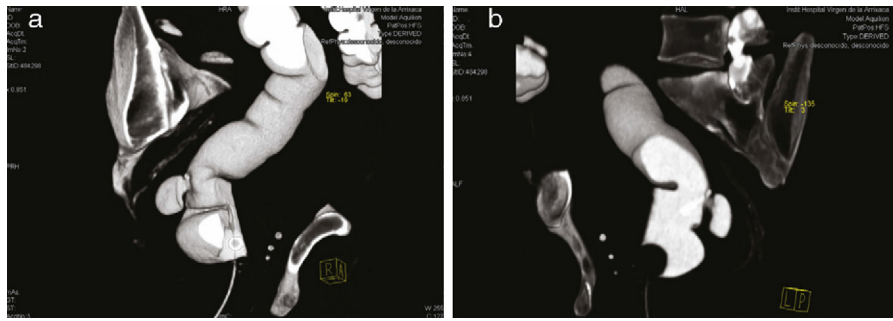


Fig. 1 – (a) and (b) CT images in which a solitary 3-cm diverticulum in the posterior side of the rectum can be seen.

congenital factors, weakness in the circular muscle layer of the rectum, adipose atrophy of the muscular layer of the rectum, as well as deficiencies in the supporting structures such as the coccyx have been described. Acquired factors are related to an increased intraluminal pressure in the rectum such as severe constipation, fecal impaction, as well as trauma or pelvic infections that weaken the rectal wall. Since the first publications, two theories have been proposed to explain the low incidence of rectal diverticula. Firstly, the uniform disposition of the longitudinal muscle fibers in the rectum, which is different from the colon. Secondly, the lower intraluminal pressure in the rectum due to the accumulation of feces and lower peristaltic movement compared to the colon.

Rectal diverticula have the same age of presentation as colonic diverticula,⁶ and are more common in men⁷ (3:19). Normally, the number of rectal diverticula is between 2 and 3. They are usually located on the lateral walls of the rectum, possibly because of its anatomic disposition. In the upper rectum the *tenia libera* and the *tenia omentalis* unite to form the layer that extends to the anterior wall of the rectum, and the same process occurs in the posterior wall with the *tenia mesocolica*. Therefore, the rectum is more reinforced in its anterior and posterior walls than in the lateral walls. Most rectal diverticula have a diameter ≤ 2 cm. In this case there was only one diverticula, and it presented a large size (3 cm), without any symptoms. There does not seem to be any relation between size and the appearance of symptoms.

Most patients with rectal diverticula are diagnosed incidentally; they are usually asymptomatic, although they can present complications due to fecal impaction and present abscesses or even perforation. Other complications associated with rectal diverticula are rectal stenosis, recto-vesical fistula, rectal prolapse or ischioanal abscess.⁸

Barium enema and colonoscopy are useful diagnostic tests. When the diverticula are located in the retrorectal space, CT scans and MRI can be very useful for the differential diagnosis with rectal cancer.⁸

Treatment of these diverticula is not always necessary when they are asymptomatic, and they should be followed-up periodically. Surgery is used only when complications appear, such as ulcers or abscesses, or in cases when rectal carcinoma is suspected.⁹

Solitary rectal diverticulum is a rare incidental finding, asymptomatic in most cases, that does not require surgical treatment if no complications are present. It should be taken into account for a correct diagnosis in order to avoid unnecessary surgery.

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Jesús Abrisqueta*, María Dolores Frutos, Juan Luján, Israel Abellán, Pascual Parrilla

Servicio de Cirugía General y Aparato Digestivo, Hospital Universitario Virgen de la Arrixaca, El Palmar, Murcia, Spain

*Corresponding author.

E-mail address: j_abris@hotmail.com (J. Abrisqueta).

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