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Rectovaginal Fistula Due to Coital Trauma. Report of a Case and Literature Review

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ABSTRACT

Introduction: *Rectovaginal fistula (RVF), an abnormal communication between the rectum and the vagina, is unusual. It is classified as simple or complex based on its size, location, and underlying etiology.*

Material and methods: *We present the case of a 27-year-old woman with postcoital RVF with perforation of the rectovaginal septum 1 cm from the introitus and 2 cm from the anal margin. Simple closure of the lesion is performed with a transanal and transvaginal approach. At 6 months there is no evidence of recurrence.*

Conclusion: *Repair with simple closure of a RVF using a mixed anal and vaginal approach has good results, with complete recovery and healing, especially in simple fistulas. Complex injuries should be treated with caution and the underlying cause should be considered.*

Keywords: *Rectovaginal Fistula; Coital Trauma*

INTRODUCTION

Rectovaginal coital trauma usually compromises the skin and mucous membranes, causing metrorrhagia. Involvement of the rectum and its abnormal communication with the vagina is unusual and is called rectovaginal fistula (RVF). It is manifested by the passage of gas or feces from the rectum to the vagina.

The incidence of vaginal injuries during intercourse is 30 and 32 cases per year in Senegal and the United States, respectively.[1] On the other hand, a study conducted at the Hospital of Calabar, Nigeria, revealed that coital injuries represent 0.7 per 1000 gynecological emergencies.[2]

RVFs are classified as simple or complex based on their size, location, and underlying etiology. Simple RVFs are located in the lower part of the rectovaginal septum or in the anorectal sphincter complex, have a diameter of less than 2.5 cm, and are of traumatic, obstetric, or infectious origin. Complex fistulae are located higher on the rectovaginal septum proximal to the anorectal sphincter complex, are greater than 2.5 cm in diameter, and are caused by radiation, malignancy, or inflammatory bowel disease.[3]

Surgical repair is associated with high rates of morbidity and recurrence (10-40%).[4] Recurrent fistulae are also considered complex due to their association with tissue scarring and decreased blood perfusion.[5]

CASE

A 27-year-old woman is admitted to the emergency department due to coital rectovaginal trauma.

The initial attention is by Gynecology where a hemostatic control and repair of the vaginal lesion is carried out. Hospital discharge at 24 h.

On the 5th postoperative day, the patient began to expel gas and feces through the vagina, for which she consulted again and was referred to the Coloproctology Section. Physical examination: BMI 25 kg/m2, bimanual palpation shows perforation of the rectovaginal septum of 1.5 cm in diameter, 1 cm from the introitus and 2 cm from the anal margin, superior to the internal anal sphincter, which is intact. Computerized axial tomography shows edema of the rectovaginal septum with passage of water-soluble contrast from the rectum to the vagina, 2 cm from the anal margin (Figs. 1 and 2).

Surgical procedure

The patient is placed in the jacknife position, after spinal anesthesia. The proctologic examination confirmed the described lesion. Placement of Parks retractor, debridement of devitalized tissue, and creation of an anal mucosal flap exposing the levator ani muscles and suturing them in the midline. Longitudinal closure with 3-0 polyglactin 910 (Figs. 3 and 4). Vaginal approach is done in lithotomy position, placement of Parks retractor, debri-

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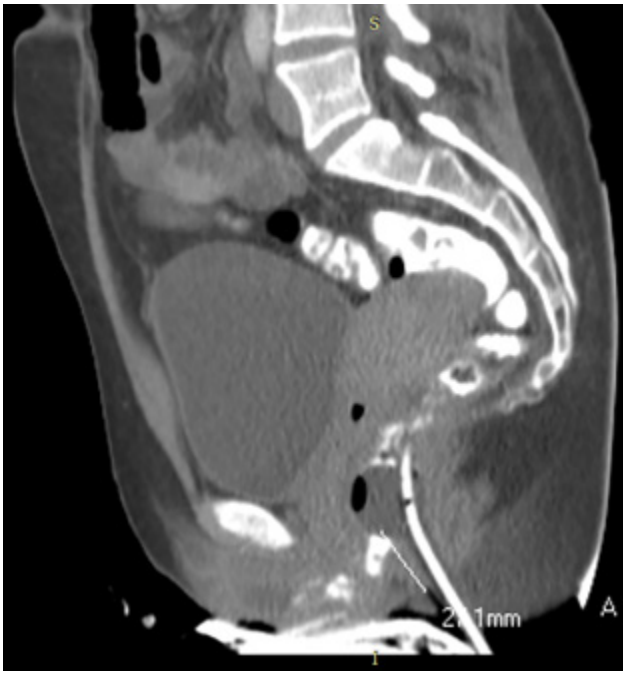

Figure 1: Computed axial tomography, sagittal plane.

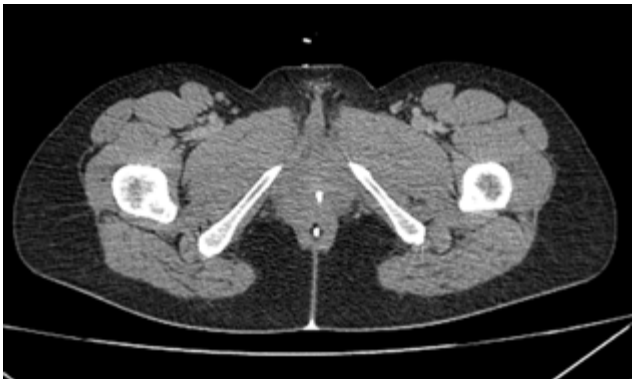

Figure 2: Computed axial tomography of the pelvis.

dement, preparation of a vaginal mucosal flap and transverse closure. Closure of the gap was verified (Figs. 5 and 6). Surgical time: 60 minutes. Blood loss: 50 cm^3.

Hospital discharge with no incident after 48 hours. Good evolution in the postoperative period. At 2 months the wound is completely healed and the patient resumes sexual intercourse. Follow-up at 6 months shows no abnormalities.

DISCUSSION

Risk factors for coital injuries are: first sexual intercourse, nulliparity, violent sex and/or supine position.[1] The most frequent anatomical site of injury is the posterior fornix of the vagina.[6]

Diagnosis is made with a physical examination, and if RVF is suspected, colonoscopy, computed tomography,

Figure 3: Rectal lesion.

Figure 4: Rectal repair.

Figure 5: Vaginal lesion.

Figure 6: Vaginal repair.

or magnetic resonance imaging may be used. Endoanal ultrasound would be useful to assess the integrity of the anal sphincter complex.[7,8]

Although there is no gold standard for RVF repair, the available evidence can be used to determine an effective treatment in each particular case and, in turn, evaluate the timing of its performance. The ideal is management in the acute or chronic stage (3-6 months).

There are several surgical techniques that are grouped into 3 approaches: transanal (success rate [SR] 80%), transvaginal (SR 80-100%) and transperineal (SR 85-100%).[3] The abdominal approach is generally indicated. for complex fistulae.[9]

In around 50% of cases that do not respond to standard treatments or due to their complexity, more aggressive procedures must be resorted to, such as defunctionalization or myocutaneous flaps.[3]

In our case, as it was a simple fistula, we opted for the mixed approach (transanal and transvaginal), due to its high success rates.

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