

## Clinical Case

Chirurgia (2016) 111: 532-534  
No. 6, November-December  
Copyright© Celsius

<http://dx.doi.org/10.21614/chirurgia.111.6.532>

# Recto-Vaginal Fistula of Obstetric Origin – A Surgical Solution

Gabriel Statescu<sup>1</sup>, Cristian Negura<sup>2</sup>, Luciana Cretiu<sup>2</sup>

<sup>1</sup>“Gr. T. Popa” University of Medicine and Pharmacy, Iași

<sup>2</sup>“Cuza-Voda” University Gynecology and Obstetrics Hospital, Iași

## Rezumat

### *Fistula recto-vaginală de cauză obstetricală - rezolvare chirurgicală*

O femeie în vârstă de 26 de ani a fost internată cu o fistulă rectovaginală care a apărut după un an și zece luni de la o naștere naturală. Această fistulă este o condiție patologică cu un impact puternic fizic, mental și sexual pentru o femeie tânără. Literatura de specialitate descrie numeroase tehnici chirurgicale de soluționare. Noi nu prea am găsit studii de specialitate care să descrie și să analizeze mijloacele variate de tehnici chirurgicale. Vom descrie tehnica pe care am aplicat-o la cazul nostru care a avut rezultat foarte bun imediat. La 5 ani de la reparația chirurgicală rezultatul e foarte bun. Fistula recto-vaginală de cauză obstetricală este foarte rară și necesită reparație chirurgicală. Calea bună de abord este cea perineală care permite o foarte bună expunere a elementelor anatomice (vagin și rect). Este de preferat folosirea firelor lent rezorbabile pentru sutură. Trebuie o foarte bună pregătire preoperatorie. Particularitatea în acest caz a fost refacerea într-un singur timp operator chirurgical fără colostoma de protecție.

**Cuvinte cheie:** fistula recto-vaginală, istoric obstetrical, tratament chirurgical, control postoperator

## Abstract

A 26 year-old female patient was admitted for the first time in the surgical, presenting an abnormal connection between the rectum and vagina given a context of an apparently clear period of time following a natural childbirth 1 year and 10 months ago. This is a rare pathological condition with a major physical, mental and sexual impact for a young female. Various surgical treatment solutions are described in the specialized literature. Yet, we have not come across any studies that analyzed the various means of surgical treatment. In what follows we will describe the technique we used in this case, with a very good immediate result and after 5 years by surgery.

**Key words:** recto-vaginal fistulae, obstetric history, surgical treatment, follow-up

## Introduction

Recto-vaginal fistula means an abnormal communication between the rectum and vagina, which can occur in various circumstances, quite rarely met, and which has a characteristic symptom: stool passes through the vagina (1).

Fistulae usually occur with young females, as their main cause is obstetrical trauma during labor. They may originate in a surgery, in a sexual act, but as such, they are far less frequent. Among other etiologies, one may count with various types of neoplasm, radiotherapy side effects, infections (abscess) and inflammatory bowel disease (Crohn's disease)(2).

Fistulae can occur in the upper or in the lower region. They are not difficult to diagnose as a careful history may already point to the diagnosis, whereas the physical examina-

Corresponding author:

Gabriel Statescu, MD  
“Gr. T. Popa” University of Medicine  
and Pharmacy, Iași, Romania  
E-mail: gabistatescu@yahoo.com

tion confirms such supposition, locating the fistula and identifying its possible etiology. The surgery remains the therapeutic option, even though cases have been described where local and general medication may cause fistulae to close (3).

Surgical treatment means performing a local vaginal, perineal, transrectal repair with or without temporary protective colostomy, based on the etiology of the fistula (4).

## Case report

A primipara 26-year old female patient (ME), living in the rural environment, reports to a specialized check-up, as she has been permanently eliminating stools through her vagina for about one month. She had a natural childbirth one year and 10 months ago, but for about one month before reporting to hospital, she had observed that stools had been eliminated through her vagina. She had waited initially, thinking that it would be temporary, but as symptoms did not improve, she reported to a gynecologist that referred her to our surgery ward with a recto-vaginal fistula diagnosis. The general clinical presentation and the usual paraclinical investigations came out normal. No scar was spotted with the local examination of the perineal area. The local vaginal examination underscored a fistula orifice, located 3 cm off the skin and mucous membrane, on the rear vaginal wall, with a an approximate 5 mm diameter; with signs of periorificial inflammation. The rectal examination performed using the gynecological position highlighted a normal, normotonic anal sphincter, whereas the exploratory index reached an orifice located on the anterior rectal wall, on the median line, at around 5 cm of the anal margin. The glove was visible at the level of the vaginal orifice. Thus, the recto-vaginal fistula diagnosis was confirmed, whose lower location indicated a surgical solution, which the patient immediately accepted. After determining the need for a surgical treatment, the surgeon performed an elective perineal surgery under spinal anesthesia. The patient was informed both on the pre-surgery procedure and likelihood of a temporary protective colostomy if the local conditions would not be satisfactory, and she was very reluctant to accept the latter option. Initially, the mechanical pre-surgical preparation of the colon and rectum lasted for two days, which was supplemented with a pre-surgical enema, whereas the vagina was prepared with a Betadine solution. The patient was put on a hydration diet and antibiotics as follows: Ampicillin 3g /day and Metronidazole 4 doses/ day. The surgery was performed with the patient in a gynecological position, a rectal examination was performed which underscored the fistula orifice. The incision was made at the junction between the skin and mucous membrane of the vagina, while the rear vaginal wall was dissected to highlight the fistula orifice. Thus, the rectal wall continuity solution was laid open under the form of a cross-section opening, with neat margins, without perifissular fibrosis (Figs. 1, 2). The rectal wall was repaired in a single cross-section plane using a continuous stitch with a slow absorbable suture (Figs. 3, 4). Then the anal lifting muscles were stitched using



Figure 1. Exploration of fistula through rectum

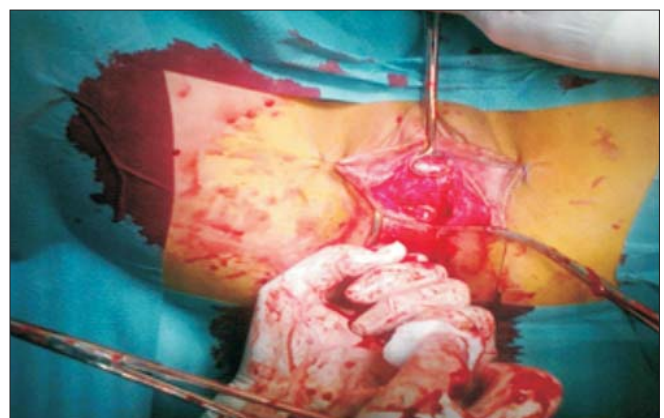


Figure 2. Rectal opening of fistula

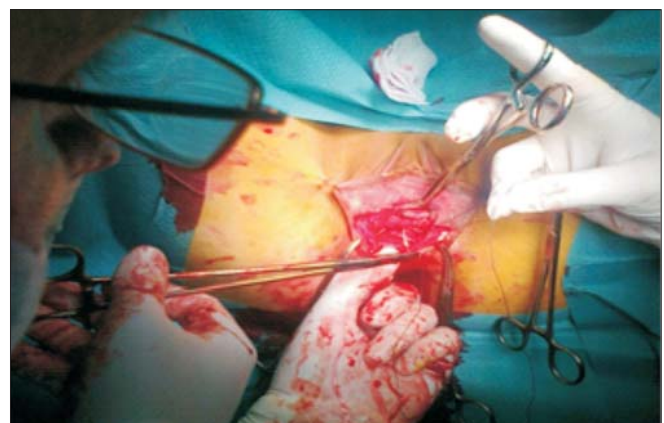
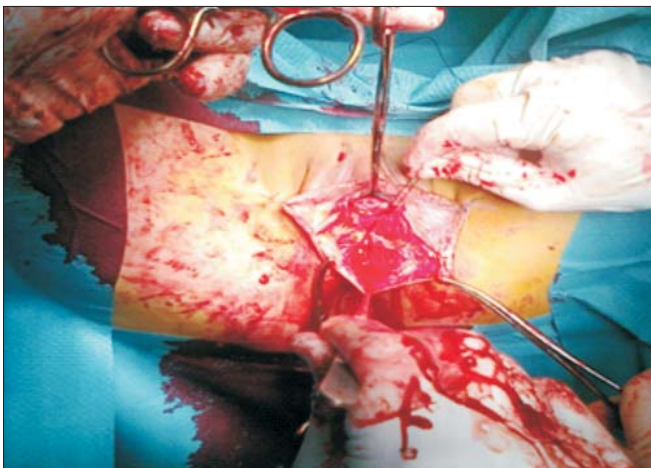


Figure 3. Transvers suture of rectal fistula

separate sutures (Figs. 5, 6). They had been spread on the entire rectal wall as they came into contact with the vaginal wall. The vaginal wall did not require any suture as, given the good pre-surgical preparation, it is prone to closing (it was not even possible to insert a catheter). Following the surgery of the anal lifting muscles, the junction between the skin and the mucous membrane was repaired with slow



**Figure 4.** Finish of stitching



**Figure 5.** Myotomy levator ani muscle



**Figure 6.** Finishing myotomy of levator ani muscle

absorbable sutures as well. The rectal suture was carried out under very good conditions, owing to the pre-surgical preparation which the patient took well as she is young and very much willing to get well, so that the surgeon did not feel it was necessary to perform a temporary protective colostomy.

We protected the rectal suture with a Foley 20F catheter inserted through the anus, whereas the balloon was inflated at around 12 to 14 cm from the anus. Following the surgery, the patient was also inserted a urinary catheter for 24 hours, she received the usual analgesics and the therapy with antibiotics was continued. The patient rapidly regained bowel transit for gases that eliminated through the transanal catheter, but which was removed the following day. Three days following the surgery, the patient had a normal stool and was released from hospital with the following recommendations: on a diet to avoid constipation, use of glycerin suppositories to protect stools, avoid any sexual contact for 45 days. When she came back for her post-surgical examination after one month, her status had gone back to normal.

## Discussion

This is a condition which is very stressful from many points of view for a young female. At the same time, it is a condition that is extremely rare. Undoubtedly, the recto-vaginal fistula has its origin in the obstetrical trauma. In this case, the free interval between the childbirth and the occurrence of the recto-vaginal fistula was of 1 year and 10 months. Once established, the fistula progressed which is why it is worthy to note the importance of the pre-surgical preparation. In this case, it meant the elimination of the whole contents of the fistula and keeping the vaginal cavity very clean. It was a fistula that responded well to perineal repair. Such an approach is very neat as the incision will be very difficult to spot following the scarring process. The pros related to this approach are a short period of recovery and rapid reintegration. The key to this intervention is to interpose the anal lifting muscles among the rectal and vaginal suture because of their good strengthening function.

## Conclusions

Recto-vaginal fistulae are a rare condition that requires surgical repair.

The best point of entry is perineal as it provides a very good exposure of both the vagina and the rectum. It is recommended to use slow absorbable stitching materials.

It is a must to meticulously perform the pre-surgical preparation. The distinguishing element in this case is the fast reporting to a specialized examiner's and determining the surgical treatment from the onset without a protective colostomy.

## References

1. Burke C. Rectovaginal fistulae. Clin J Oncol Nurs. 2005; 9(3): 295-7.
2. Casadesus D, Villasana L, Sanchez IM, Diaz H, Chavez M, Diaz A. Treatment of rectovaginal fistula: a 5-year review. Aust N Z J Obstet Gynaecol. 2006;46(1):49-51.
3. Scott-Conner CEH, Rakinic J. Rectovaginal fistula. Emedicine, 2006.
4. Taylor D, Rakinic J. Rectovaginal fistula: treatment. Emedicine, 2009