

Surgical treatment of traumatic cloaca¹

Tratamento cirúrgico da cloaca pós-trauma

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ABSTRACT

Purpose: To assess the functional results of surgical treatment of traumatic cloaca by a technique including reconstructive plastic surgery of the perineal body and of the rectovaginal septum using the puborectal and external sphincter muscles. **Methods:** Six female patients were submitted to surgical treatment for correction of the cloaca over a period of 5 years (2002 to 2007). Loop sigmoidostomy was performed in two patients. The mean duration of symptoms before surgical treatment was 97.5 months (4 months to 36 years), mean patient age was 36 years (17 to 58 years) and the follow-up period was 14.6 months (6 months to 2 years). **Results:** Five patients (83.3%) regained fecal and flatus continence and one patient had flatus incontinence. **Discussion:** Surgical treatment yields good results, is safe and involves low rates of complications.

Key words: Traumatic Cloaca. Fecal Incontinence. Reconstruction of The Rectovaginal Septum/Sphincteroplasty.

RESUMO

Introdução: A causa mais comum da cloaca é o trauma obstétrico. O objetivo desse trabalho é avaliar os resultados do tratamento cirúrgico empregando-se plástica reconstrutiva do corpo perineal e do septo reto vaginal. **Métodos:** Foram operadas seis mulheres, num período de 5 anos (2002-2007). Sigmoidostomia em alça foi realizada em duas pacientes. O tempo médio de duração dos sintomas no pré-operatório foi de 97,5 meses (4 meses a 36 anos), a faixa etária média foi de 36 anos (17-58) e o período de seguimento foi de 14,6 meses (6 meses – 2 anos). **Resultados:** Cinco pacientes (83,3%) recuperaram a continência anal para fezes e flatos e uma paciente permaneceu com incontinência para gases. **Discussão:** O tratamento cirúrgico da cloaca pós-trauma apresentou bons resultados, sendo considerado um procedimento seguro, com baixo índice de complicação.

Descritores: Cloaca Traumática. Incontinência Fecal. Reconstrução Parcial de Septo Retovaginal/Esfincteroplastia.

1. Study performed in the Division of Coloproctology, Department of Surgery and Anatomy, Ribeirão Preto Faculty of Medicine, University of São Paulo, Brazil.

Introduction

Traumatic cloaca is caused by the anterior loss of the sphincter apparatus and of the perineal body, resulting in a common opening for the rectum and vagina. The most common cause is obstetrical trauma resulting from episiotomies that lead to third and fourth degree perineal lacerations, with destruction of the external and internal sphincter apparatus and of the perineal body.¹ The incidence is approximately 0.003% of all vaginal deliveries, is more

common at first delivery and more prevalent in the presence of median episiotomies, forceps deliveries, and large weight infants.^{2,3} The symptoms consist of flatus and fecal incontinence, causing serious social, sexual and psychological problems for the patients.² One of the surgical techniques for the correction of the cloaca includes reconstructive plastic surgery of the perineal body and of the rectovaginal septum using the puborectal muscle and the external sphincter (Figure 1-8).

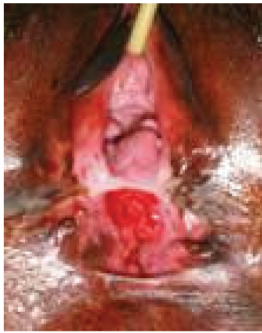


FIGURE 1 - Initial aspect of the cloaca

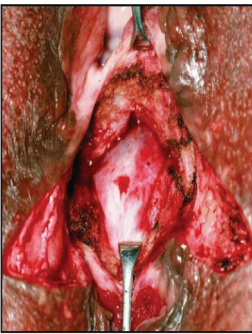


FIGURE 3 - Dissection between rectum and vagina repaired with an Allis clamp

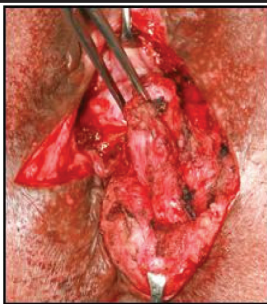


FIGURE 5 - External anal sphincter muscle dissected and repaired



FIGURE 7 - Suture of the vaginal mucosa

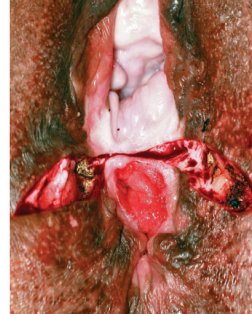


FIGURE 2 - Elliptical incision in the rectovaginal septum



FIGURE 4 - Puborectal muscle dissected and repaired

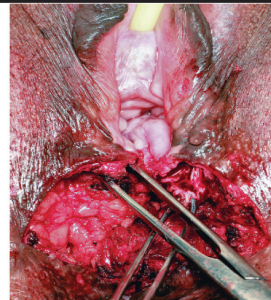


FIGURE 6 - Repaired bulbospongiosus muscle



FIGURE 8 - Skin closure by Z-plasty

Methods

Over a period of 5 years (2002 to 2007), 6 patients were submitted to surgical treatment for correction of the cloaca using the technique described in the abstract. All patients were submitted to preoperative antegrade colon preparation and to antibiotic treatment. Loop sigmoidostomy was performed in two patients. The mean duration of symptoms before surgical treatment was 97.5 months (4 months to 36 years), mean patient age was 36 years (17 to 58 years) and the follow-up period was 14.6 months (6 months to 2 years). The cause of the cloaca was a normal delivery with 3rd and 4th degree perineal laceration in 3 patients, a motorcycle accident with fracture of the pelvis and perineal laceration in one patient, fistulotomies on the anterior midline in one patient, and perineoplasty performed by a gynecologist in one. In all patients with obstetrical trauma, primary suture of the sphincter and skin had been performed by the obstetrician in the delivery room.

Results

During the immediate postoperative period a patient presented a subcutaneous seroma with spontaneous drainage and without local infection. On the 15th postoperative day one patient developed infection of the surgical wound and was treated with a systemic antibiotic and local hygiene. In another patient, a subcutaneous fistulous pathway persisted after local healing and was treated by fistulotomy on the occasion of reconstitution of intestinal transit. In the two patients submitted to colostomy, reconstitution of intestinal transit was performed 8 weeks after the initial surgery, without complications. Five patients became continent for solid feces and flatus and one patient continued to present flatus incontinence.

Discussion

In most cases, traumatic cloaca is caused by perineal lacerations secondary to vaginal deliveries or episiotomies. Although most of these injuries are primarily corrected by obstetricians still in the delivery room, some cases are unsuccessful due to complications such as hematomas, infections, repair under tension, and lack of intestinal preparation.² Due to the local inflammatory process, an interval of at least 3 months should be allowed between delivery and surgical correction. Transit bypass with colostomy usually is not necessary and is reserved for selected cases. In most published series, the patients develop satisfactory flatus and fecal continence after surgical correction.^{1,3} The few patients who continue to have incontinence for liquid feces or flatus may benefit from a program of perineal exercises or biofeedback therapy.³ The patient should avoid vaginal delivery after future pregnancies.^{1,4}

Surgical treatment yields good functional results, is safe and presents low rates of complications. Most patients regain flatus and fecal continence.

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Comments:

The loss of voluntary evacuation control is a condition greatly upsetting to the quality of life. Incapacity of fecal contention, that is, the involuntary loss of feces and gas, or the impossibility to eliminate feces and/or gas in an adequate place and time, although not a life threatening disease, is a physical and psychological aggression to the individual resulting in progressive isolation and alterations in the body image, self-esteem and identity. The present study, although having a small casuistry, should be published not only for the importance of the theme, but also for showing in a didactic manner the technical steps employed in sphincter reconstruction and for calling attention to an avoidable post-partum complication. Greatly experienced world centers have published casuistics with 20-25 cases, thus, in comparison the brazilian experience should be considered good. The article was written according to the journal rules with a clear and objective introduction. Surgical techniques were described in detail and the results and discussion are pertinent. Literature references follow journal recommendations.

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