# Bladder exstrophy and pregnancy. Report of an infrequent case.

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**Abstract**
Bladder exstrophy is a disease caused by failure in the development of the cloacal membrane, with bladder exposure and genital malformation.
In some cases, it is difficult to achieve the desired urinary continence, and in exceptional cases of patients who reach adulthood without treatment, an effective alternative is the creation of a urinary reservoir, as in the case presented. A 21 year-old female patient with classic bladder exstrophy that reached adulthood without treatment, came for obstetric care due to premature labor pain.

**Key words**
Bladder exstrophy, pregnancy, genital malformation, urinary incontinence

## ■ INTRODUCTION

Bladder exstrophy is a disease caused by failure in the development of the cloacal membrane with bladder exposure and genital malformation.
It is a rare disease in women, but more so in adult women and even more so in those that without previous surgery are able to become pregnant. There are two reasons for the rareness of these cases.
The first reason is that early manifestations of this malformation that is present at birth, because of their severity, induce parents to seek help and specialized treatment from the neonatal period or later during childhood or adolescence.
The second reason is that the severe malformations of the external genitalia seriously compromise the social and sexual lives of these women who become isolated and avoid sex because it is very difficult and penetration, almost impossible during intercourse. Moreover, these women are rejected by the appearance of their abdomen and the unpleasant odor caused by visible continuous leak of urine.

## ■ CASE PRESENTATION

A female patient, 21 years of age, is consulted for being six months pregnant and presenting premature labor pains.
Obstetric physical examination findings:
Last menstrual period: unknown.
Abdomen: gravid, uterine height 24 cm
Presentation: cephalic
Position: right dorsal
Situation: longitudinal
Fetal focus: 140/min, contractions 1-2/10 minutes
Genital examination:
Diastases of the pubic symphysis: malformed external genitalia with loss of vulvar anatomy and hypotrophy of the major and minor labia, which lack a midline fusion; lack of vulvar vestibule thus, the vagina opens to the exterior in the middle portion of the labia separation. The urinary bladder

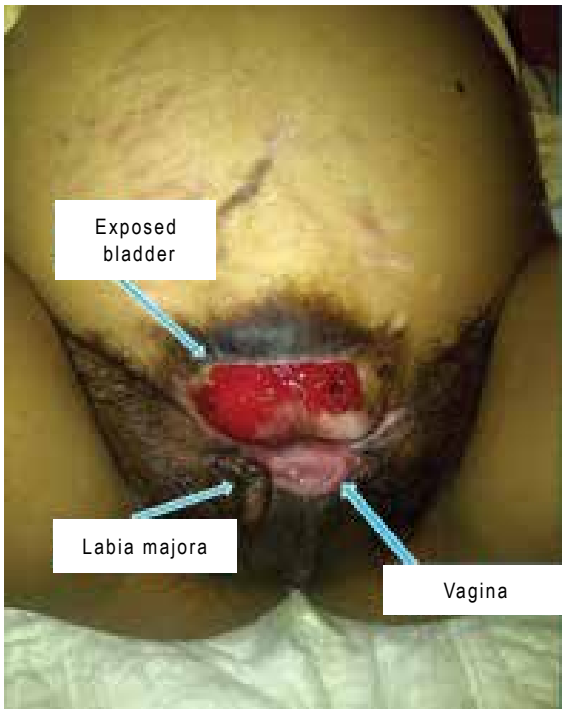


*Figure 1. At presentation.*

is exposed because the abdomen wall covering is missing in the anterior and lower region of the abdomen. The clitoris

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*Figure 2. After surgery.*

is not visible. There is constant and visible urine loss due to bladder exposure (Figure 1); perineum and anus without visible external malformations.
Diagnosis: Threat of premature delivery Bladder exstrophy.
Conduct:

- Hospitalization
- Tocolysis with oral Nifedipine every 8 hours.
- Induction of fetal lung maturity with intravenous (IV) Dexamethasone
- Ampicillin 1 gram IV every 8 hours (for pathological urine).

Daily obstetric follow up was done in the Department of Obstetrics and the patient evolves satisfactorily until week 36 of pregnancy, when she begins to refer labor pains again. On physical examination strong uterine contractions and loss of the mucous plug diagnosing labor work are found. Due to the impossibility of confirmatory vaginal examination, emergency cesarean section was scheduled, which is successfully carried out. A six-pound newborn male is extracted with nine point Apgar score at one minute and nine, at five minutes without evidence of external malformations.
The patient favorably progresses after surgery without postoperative complications (Figure 2). Seven days postpartum she is referred to the Urology Department at the Xela Hospital for surgical correction of the genito-urinary malformation the following month, after full recovery. She is discharged from the Obstetrics Department of the National Hospital.
The surgical intervention consisted only of bladder resection and placement of an ileal pouch for urine collection, pending a second and perhaps third intervention by orthopedics, gynecology and urology specialists to perform osteotomy in order to correct the pubic diastasis and restore vulvo-vaginal anatomy and urinary excretory pathways, which will enable better quality of life socially and sexually.

## ■ CONCLUSIONS

This presentation is considered a substantial contribution to the study and understanding of this condition due to its exceptional occurrence, the delay in its diagnosis due to negligence of the patient and her family and the occurrence of pregnancy in this type of malformation and under such circumstances.

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