

# INTRAPERITONEAL BLADDER RUPTURE FOLLOWING RETENTION OF URINE DUE TO A RETROVERTED GRAVID UTERUS

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## Introduction

Retroversion with pregnancy is not an uncommon condition. It usually rectifies itself by 12 to 14 weeks. If it is not able to do so, retention of urine occurs due to pressure and elongation of the urethra due to stretching of the anterior vaginal wall. This, if not taken care, results in abortion or incarceration of the uterus leading to sacculation and rupture, which is very rare. Rupture of bladder has never been seen, as a complication, which may occur in these cases, if such patients sustain slightest trauma or blow on the abdomen. In this report we present one such case of bladder tear following a fall in a case of retroverted gravid uterus.

## CASE REPORT

A 20 years, second gravida came with history of amenorrhoea of 4 months and off and on retention of urine for 20 days. Twenty days back she developed retention of urine for which she was catheterized by a general practitioner. Two days prior to admission she again developed retention of urine for which she was advised few tablets. Following that she was able to pass only small amounts urine. The same day she fell on the ground on her face and developed retention of urine. For this she had to be

catheterized again and 500 ml. of blood stained urine was drained and then the patient was referred to the University Hospital. By the time patient reached hospital, she had started bleeding per vaginam with pain in lower abdomen.

On examination patient was markedly pale, with pulse rate 108/mt. and blood pressure of 100/70 mm Hg. Lower abdomen was tender and rigid. Catheterization revealed frank blood stained urine. On pelvic examination the uterus was found to be retroverted and 12 to 14 weeks size of pregnancy and impacted in pouch of Douglas. Cervix was admitting one finger, through which products of conception could be felt. Patient aborted after one hour. A provisional diagnosis of rupture bladder with pregnancy was made and this was confirmed by an abdominal tap.

At emergency laparotomy, a 6 cm. vertical tear in the posterior wall of the bladder, through which loops of the bowel were protruding, was seen. Blood dots were removed from the bladder and peritoneal cavity. Tear was closed in two layers by 2/0 chromic catgut. Drain was put in flanks and retropubic space and bladder was drained by Mallicot's catheter suprapubically and a Foley's from below. All the drains were removed by 9th day excepting urethral catheter which was removed after 2 weeks. Postoperative period was uneventful and patient had no incontinence of urine. Patient had no complaints when she came for 6 weeks follow-up.

## Comments

To our knowledge such a case of bladder tear in association with retroverted gravid uterus has not been dis-

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cribed, though it is a theoretical possibility as in case of blow to lower abdomen when the bladder is distended. Since the distended normal bladder is quite thin and extends well superiorly above the symphysis, a sudden blow to this region can effect the semblance of a bursting of the distended organ. Because the distal and lateral aspects of the bladder are supported by bony or muscular structure, the peritoneal surface becomes the weakest point and most susceptible to rupture (Prather 1968).

Other more common causes of bladder

rupture, besides obstructed labour in females, are fracture of bony pelvis.

Summary

Rupture of urinary bladder following direct injury on the abdomen in a case of retroverted gravid uterus with retention of urine is a rare and serious complication. Such a case is reported and mechanism of injury is discussed.

Reference

1. Prather, G. C.: Campbell's Urology, Philadelphia, W. B. Saunders Company, 852-857, 1968.