

## Case report

# Urinary retention in women with isolated Stage 3 rectocele

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**Abstract:** Three unusual cases of women with urethral obstruction in the presence of a 3<sup>rd</sup> stage rectocele are reported. Correction or reduction of the rectocele resolved urinary obstruction in all patients.

**Key words:** Rectocele; Urethral obstruction; Urinary retention.

## INTRODUCTION

Uterine prolapse and cystocele can cause bladder outlet obstruction, due to kinking or compression of urethra<sup>1, 2</sup> while rectocele can sometimes cause incomplete evacuation of stools.<sup>3</sup> Three cases are presented where an isolated 3<sup>rd</sup> stage rectocele led to urinary retention. Clinical assessments of prolapse were performed using the Baden-Walker Half Way System (HWS).<sup>4</sup>

## CASE REPORT

*Case 1.* In January 2003 a 62 years old woman presented with symptoms of incomplete bladder emptying, slow and intermittent stream and a history of recurrent pyelonephritis since 2002. She had previously undergone laparoscopic hysterectomy and bilateral salpingo-oophorectomy in February 2002 because of endometrial adenocarcinoma and then multiple ablations of vulvar lesions due to well differentiated squamous cell carcinoma. This had been followed by bilateral inguinal lymphadenectomy.

On inspection both labia minora and clitoris were missing. The external urethral meatus was hypospadiac and completely hidden by a 3<sup>rd</sup> stage (HWS) prolapse of the posterior vaginal wall epithelium (Figs. 1, 2). Uroflowmetry was not obtained but post-voiding residuals of 200-250 ml were documented. Cystocolpodefecography (Fig. 3) and examination by a proctologist confirmed a stage 3 rectocele together with good anal sphincter function and a tonic pelvic floor. In April 2003 the patient underwent colpoperineoplasty.

Normal micturition was restored and at follow up 51 months after surgery uroflowmetry was normal with no post void residual. The external urethral meatus was now visible and the rectocele had disappeared.

*Case 2.* In March 2006 an 83 years old woman presented with urgency, frequency, urge-incontinence and perineal discomfort. She had previously undergone a laparoscopic hysterectomy for fibroids. Urine analysis and urinary cytology were normal. She had a stage 4 rectocele and a stage 1 anterior colpocele (HWS). Micturition diaries showed 20 voids per day with a mean voided amount of 70 ml. Bladder-scan documented 280-300 ml post void residual. The rectocele was reduced with a ring pessary and a urodynamic assessment was performed. All parameters were normal and the bladder capacity was 400 mL. The patient chose to follow a conservative course with a ring pessary. Twelve months later the ring pessary was still well-tolerated while urinary symptoms had improved significantly. At follow up the urinary diary revealed 8-10 micturitions per day with no more incontinence and no measurable post void residual.

*Case 3:* In April 2006 a 63-year-old woman was admitted into our urology unit for investigation of hypogastric pain and obstructive urinary symptoms which had appeared 10 days before. She reported long term constipation but

the constipation had been worsening in the last few months and was associated with the appearance of genital prolapse. On examination we found bladder overdistension and a 3<sup>rd</sup> stage rectocele (HWS) with significant faecal impaction causing direct pressure on the anterior wall of the vagina and urethra.

A urethral catheter was placed, with slow drainage of 1000mls of urine, and the faecal impaction was resolved using digitation and enemas.

A pelvic ultrasound was normal. The rectocele was reduced using a ring pessary while a programme of regular



Fig. 1. - *Case 1.* - Posterior colpocele evident with the patient straining in the supine position: labia minora and clitoris are absent and the urethral meatus is not visible.



Fig. 2. - *Case 1.* - Straddling and pulling up the labia majora the urethral meatus becomes visible and it is appreciable the obstructive effect on it by the rectocele.



### Urinary retention in women with isolated Stage 3 rectocele

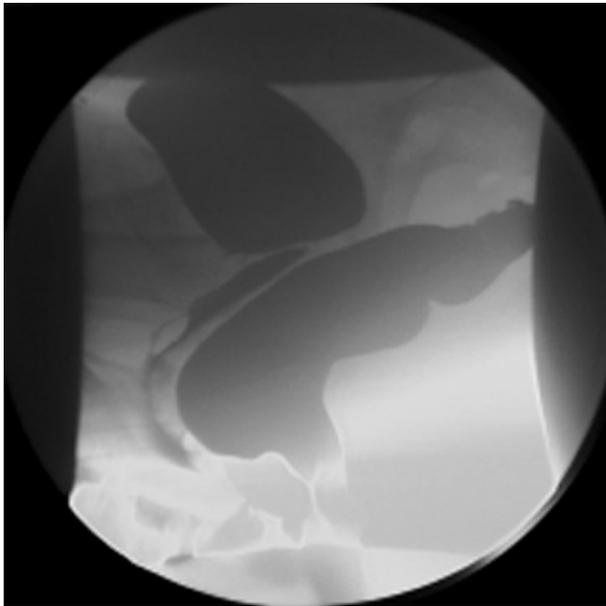


Fig. 3. – Case 1. - Cystocolpodefecography in sitting position during straining; the posterior colpocele is caused by a significant rectocele.

bowel evacuations was suggested. The patient resumed satisfactory urinary voiding without any post void residual. A year later she is still using a ring pessary without any urinary problems.

#### DISCUSSION AND CONCLUSION

Isolated rectocele, often asymptomatic, can sometimes lead to rectal symptoms and occasionally can cause urinary symptoms. Only one case of urinary obstruction following rectocele could be found in the literature.<sup>5</sup>

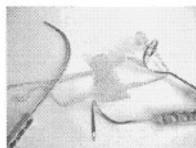
We have reported 3 cases in which a significant (Stage 3 or 4) rectocele has been associated with urinary retention. Rectocele exerted a direct pressure to cause obstruction of the urethral meatus in 2 patients, while in third woman urinary obstruction resulted from the pressure of a rectocele that was distended with impacted faecal material. In all cases surgical repair of the rectocele or reduction of the rectocele using a ring pessary resulted in cure of the urinary retention.

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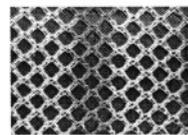
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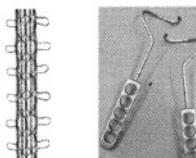
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