

Case Report

Vesicovaginal fistula with vault prolapse following abdominal hysterectomy

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Introduction

Pelvic organ prolapse (POP) is a common condition, which along with urinary incontinence, fecal incontinence and voiding dysfunctions make up an interrelated group of conditions known collectively as disorders of the pelvic floor. One in nine women will undergo surgery for prolapse or incontinence by age 80 and 30% of these will require reoperation¹. However, most of the urinary problems associated with POP are due to stress urinary incontinence. True incontinence due to vesico vaginal fistula occurring after abdominal hysterectomy concomitant with vaginal vault prolapse is very rare. A case of vesicovaginal fistula with vault prolapse is being reported for its rarity.

Case report

A 72 year old obese lady reported with the chief complaint of continuous dribbling of urine for the last 25 years following abdominal hysterectomy, something

coming out per vaginum for the last 5 years, and intense pain in the perineum for the last 20 days.

The patient had undergone an abdominal hysterectomy for menorrhagia 25 years back of which no records were available. According to her, there was excessive bleeding during surgery; she had been transfused 5 units of blood and had barely survived the operation. She noticed dribbling of urine from the immediate postoperative period onwards, even when the Foley catheter was in situ. She was discharged from the hospital after one month with the advice to come for repair of the fistula after three months. She was not passing any urine per urethra. She was a widow and sexually inactive. Eight months post hysterectomy she was found to be unfit for fistula repair due to severe anemia. Thereafter, she never visited any hospital for repair.

On general examination, she was obese and hypertensive with BP range between 150/100 mm of Hg and 180/100 mm of Hg. Systemic examination was normal. On local examination of genitalia, the vaginal vault was seen to be everted with extensive ulcerations. There was a 2 cm diameter defect on the anterior vaginal wall close to the vault communicating with the bladder cavity, through which urine was escaping in a continuous stream.

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Her Hb was 9.2 Gm%. While investigating she was found to be diabetic with a fasting blood sugar of 138 mg/dL and postprandial of 192 mg/dL but all other parameters were normal. The diabetes was controlled on regular insulin. The decubitus ulcers healed with daily vaginal packing.



Figure 1. Site of fistula

The patient was counseled regarding the nature, route and complications of surgery. She opted for vaginal approach and was operated on 20th January, 2005, under spinal anesthesia. The vaginal mucosa was excised all around the fistula opening and fibrosed margins of the bladder wall were also excised. The bladder defect was closed in three layers by vicryl '000' suture. The redundant vaginal mucosa was separated from the underlying bladder and the bladder pushed up by applying four fascia buttressing sutures. The posterior vaginal wall was also excised and the underlying

enterocele repaired. Partial colpocleisis and posterior colpoperineorrhaphy with high plication of levator ani muscles were done and Foley catheter left in situ for 21 days. The patient had an uneventful recovery and was discharged on 11th February, 2005.

Subsequently, she started having urge incontinence suggestive of detrusor dyssynergia. She was put on tolterodine 4 mg slow release tablet once daily for next 3 months. At follow up she reported no complaints and on examination the vagina was about 2 inches in length with good healing. At her last follow up examination on August 2006 she was continent and had no evidence of vaginal prolapse.

Discussion

Injuries to the urinary tract during hysterectomy are reported to be 4.8% when checked cystoscopically². The incidence of vault prolapse after abdominal hysterectomy is only 2%³. But both these complications to occur together is a very rare finding. Primary prevention of urinary tract injury during hysterectomy entails careful localization of ureters before clamping the infundibulopelvic ligament, staying close to the uterus while clamping the uterine arteries and Mackenrodt's ligament, and using intrafascial technic for benign conditions. Most of the post hysterectomy vaginal vault prolapses can be prevented by careful culdoplasty with a permanent suture at the time of abdominal and vaginal surgery⁴.

With new advances in reconstructive surgeries there are a variety of surgical approaches to the correction of vaginal vault prolapse. Comparison of sacrospinous fixation by vaginal and abdominal route have shown better results with abdominal route⁵ and this is more suitable for younger patients, desirous of preserving their sexual activity who are at less risk of complications. When any surgical intervention is considered most appropriate operation is selected for individual patient giving due importance to safety and efficacy. For elderly patients at high risk for anesthesia due to medical complications and not desirous of preserving coital potential, vaginal obliterative procedure may be the best surgical approach⁴. It is a highly effective technique with low morbidity and a success rate ranging from 90 to 100%. Regret after colpocleisis is uncommon and ranges from 0 to 9%⁶.

Complications of hysterectomy make the life miserable for women. Associated morbidity can be reduced as

the complications are readily avoidable and treatable at the time of primary surgery. Even when detected post operatively the patient can be encouraged to undergo secondary repair after 3–6 months. Associated fistula with vault prolapse is a rare condition and can be treated effectively by flap splitting technic. Partial colpocleisis and posterior colpoperineorrhaphy can be done in the same sitting.

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