# VAGINAL VAULT PROLAPSE - A CASE REPORT

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#### **ABSTRACT**

Vaginal vault prolapse after hysterectomy is a distressing complication for both the patient and the surgeon. Successful repair of post-hysterectomy vault prolapse is one of the most difficult problems in gynaecological surgery. The aim of the surgery should be to restore coital function and cure the prolapse permanently.

Keywords: Vaginal vault prolapse, post-hysterectomy, vaginal repair.

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### CASE REPORT

A 49-year old Indian female presented with complaints of a mass per vaginum of 7 years duration. The mass which earlier presented only on stress was now completely outside the vagina.

She was a para 3. Her first delivery was a forceps delivery, details of which were not available. She subsequently had two spontaneous vaginal deliveries. The babies weighed 7lbs, 7lbs 9oz and 8lbs 2oz respectively, at birth. She had no history of chronic cough or constipation. She was being treated for hypertension over the last 5 years. She had a third degree utero-vaginal prolapse along with a large cystocoele, rectocoele and enterocoele. A vaginal hysterectomy along with anterior and posterior repair was done on 6 May 1986. She had no post-operative complications and was discharged on the eighth post-operative day. She resumed work six weeks later, which involved climbing 3 flights of stairs daily.

She subsequently was seen regularly for follow-up. Eight months after surgery, she noticed a mass per vaginum on straining, which gradually became larger over the next few months. On examination, she was found to have vaginal prolapse along with a cystocoele. She was listed for surgery on 11 May 1987.

# **OPERATION**

The anterior vaginal wall was opened by a longitudinal incision from the apex of the prolapse to the urethral meatus. The pubocervical fascia was then separated from the vagina exposing the bladder pillars beneath the most distal portion of the anterior vaginal wall protusion. The pubocervical fascia was then approximated in the midline with Dexon 00 sutures with preservation of the vesico-urethral angle. The excess vaginal tissue was then excised. The anterior vaginal wall was then closed with Dexon 00 sutures, thus fixing the vaginal wall to the underlying pubocervical fascia.

Tenacula were then placed on the skin at the introitus and the vagina was separated from the rectum to expose the levator ani muscles. The enterocoele was then identified and dissected free. Vaginal dissection was continued to the base of the prolapse. The enterocoele was closed at the highest point with purse string sutures of 00 Dexon sutures. The perirectal fascia was then identified on each side of the rectum and approximated with interrupted sutures, till the level of the levator ani muscles.

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N K S Tharmaseelan, MBBS, FACS, MRCOG Consultant Obstetrician & Gynaecologist The highest suture was placed in the apex of the vault, distal to the ligated enterocoele sac to support the vault. Excess vaginal tissue was excised and the vaginal wall closed with 00 Dexon sutures. The levator muscles were approximated with interrupted sutures for perineal support. The skin was closed subcutaneously with 000 Dexon sutures. After completion of the procedure, the vaginal axis was now posterior in the hollow of the sacrum.

Post-operatively, she was on continuous bladder drainage via a urethral catheter for seven days. She was given a course of antibiotics, Ampicillin 500mgm, six hourly and metronidazole 200mgm tds. She had difficulty in emptying her bladder on the eighth post-operative day when the catheter was removed. On discharge 3 days later she was able to void urine without difficulty.

She has now been on follow-up for more than three years with no complications. She is sexually active.

#### DISCUSSION

Vaginal prolapse is erroneously considered to be a complication of vaginal hysterectomy only<sup>(2-4)</sup>. In one of the largest series of post-hysterectomy vault prolapses reported, of 190 cases, Symmonds<sup>(4)</sup> found it to be an almost equal occurrence following abdominal or vaginal hysterectomy. Even in the best of surgical hands, a 20% recurrent prolapse rate can be found following vaginal hysterectomy<sup>(5)</sup>.

Aetiological factors of importance are obstetric trauma, omission of correct vault suspension at primary surgery and inherent weakness of the supporting ligaments, a process that worsened by the menopause<sup>(1)</sup>. All these factors may have contributed to vault prolapse in this patient. Post-operatively when she returned to work she had to climb three flights of stairs. This may also have been a contributory factor. Other causes are post-operative infection and haematoma formation<sup>(6)</sup> which did not occur in this patient.

A vaginal enterocoele with or without vaginal vault prolapse merely represents a difficult type of hernia<sup>(7-4)</sup>. The fundamental principles of the operative repair of any hernia are to dissect out the herniated structure, to reduce or resect the sac, and maintain its reduction or obliteration by supporting structures, rather than utilisation of materials on tissues to suspend the herniation<sup>(2-4,6,7)</sup>. Thus for these reasons a vaginal operation is more logical and was the preferred method for this patient though there are others who favour the abdominal route, as it is easier done and there is supposed to be better maintenance of the depth of the vagina<sup>(8-11)</sup>.

The previous hysterectomy should not interfere with obtaining good vaginal support because it has not removed any of the tissues that are required. The uterosacral-cardinal ligament condensations of the endopelvic fascia can be identified. The paravaginal and pararectal fascial tissues, of

far greater importance in providing vaginal support, are relatively undisturbed. These tissues attach to the presacral area and to the levator fascia posteriorly and laterally. Similarly and of equal importance, the levator muscles have not been altered by the previous hysterectomy<sup>(4,6,7)</sup>.

In this patient, the vaginal repair seems fairly successful as after three years, she has no complications or problems. She is also sexually active. But three years may still be considered 'too short a time' to gauge the success of the above operation.

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