

# TREATMENT OF VAGINAL VAULT PROLAPSE BY A MODIFIED GILLIAM'S SUSPENSION TECHNIQUE

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## SYNOPSIS

**A repair for vault prolapse after vaginal hysterectomy, based on a modified Gilliam's suspension technique is described. It is suggested that this method be adopted also for cases of vault prolapse following total abdominal hysterectomy.**

Methods of treating vaginal vault prolapse include Colpocleisis (Howkins 1968) fixation of the utero-sacral/cardinal ligaments to the vaginal vault after initial dissection of redundant vaginal wall and peritoneal tissue (Te-Linde 1962; Scott 1972) and various types of vault suspension by the abdominal route (Te-Linde 1962; Howkins 1968).

An operation for vault prolapse after vaginal hysterectomy, by a modified Gilliam's suspension technique is described.

## CASE REPORT

Mrs. S.P.A.R., aged 63 was admitted to the University Gynaecological Unit on 13.6.1973, with a complaint of a lump appearing at the vulva of about five years duration. Recently she had also observed slight bleeding per vaginum for about two weeks. She stated that she was operated on in 1961 for 'lowering' of her womb, after which she has not had menstrual periods. She has had eight pregnancies, all being uneventful, the last one being about 25 years ago. Past history revealed nothing remarkable. On examination, her general condition was good; the pulse rate was 78 per minute and B.P. was 140/90 mm. Hg. The heart and lungs were clinically normal. Examination of the abdomen revealed no abnormality. On examination of the vulva, an elongated pinkish mass about 2 inches long was seen to protrude through the introitus, and over the apex of this protrusion was a small superficial, possibly traumatic ulcer, which probably was the cause of her recent vaginal bleeding. The lump was easily reduced and vaginal examination confirmed the diagnosis of 'vault prolapse',

there was no cystocele or a rectocele. Laboratory examinations showed the Haemoglobin and blood urea to be normal and urinalysis revealed no abnormality. It was decided to repair the 'vault prolapse' by an abdominal approach, once the small ulcer had healed and the patient was operated upon on 25.6.1973.

## THE REPAIR OPERATION AS PERFORMED ON THE PATIENT

The abdomen was opened through a sub-umbilical mid-line incision. Prior tight packing of the vagina with gauze (with the end long for its easy removal during the operation) made identification of the vagina easy. The divided remnants of the round ligament of each side (following the previous vaginal hysterectomy) were also easily identified. The rectus muscle was separated upto its lateral border from the anterior rectus sheath by careful blunt and sharp dissection. The 'identified' proximal end of the remnant round ligament was now sutured to the lateral angle of the vaginal vault using 'Ethicon' mersuture (2/0) and the ends of the suture were left long, held by artery forceps.

A long curved forcep was now passed between the anterior rectus sheath and its muscle, as far as the lateral border of the muscle, and was then directed through the internal abdominal ring into the space between the layers of the peritoneum (broad ligament) until it reached the site near the point of ligature of the divided round ligament. The point of the forceps was slightly opened and the overlying peritoneum was nicked with a scalpel and the blades introduced into the peritoneal cavity. The ends of the suture (anchoring the round ligament to the lateral angle of the vagina) were then seized by the forceps and withdrawn along the track between the rectus muscle and the anterior rectus sheath. Again using 'Ethicon' mersuture (2/0), a stitch was placed on the undersurface of the anterior rectus sheath leaving the two ends long. Each long end of this suture was now firmly tied

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to the corresponding two long ends of suture already brought out through the internal abdominal ring; the resulting pair of sutures were finally tied together and the ends cut short. The same procedure was repeated on the opposite side. The abdomen was closed in layers.

Convalescence was uneventful and the patient was discharged 12 days after the operation. At the time of discharge, no lump appeared at the vulva, on walking or on straining and vaginal examination revealed a 'good depth' vagina.

The patient was followed up at the Gynaecological Clinic and when recently reviewed just over five months after the operation, she had no complaints to make and examination revealed no recurrence of the prolapse.

#### COMMENT

The treatment of vault prolapse occurring as a late complication of vaginal or total abdominal hysterectomy is very difficult. Vault prolapse after vaginal hysterectomy, often results from faulty technique in closing the space between the bladder and rectum (Howkins 1968) and therefore prophylaxis should aim at careful suturing of the utero-sacral ligaments together at the original operation. Similarly, if routine suturing of the round ligaments to the lateral parts of the vagina during an abdominal hysterectomy is adopted the occurrence of a vault prolapse at a later date may be prevented. The use of preserved ox fascia lata strips and external oblique aponeurosis strips of the patient for suspension of the prolapsed vagina

have been reported (Grant Ward 1938; Williams and Richardson 1952; Howkins 1968). In the operation described in this paper unabsorbable suture material ('Ethicon' mersuture) was used to anchor the lateral angle of the vagina to the anterior rectus sheath after the method of Gilliam's operation. The operation is relatively simple to perform and has proved to be very satisfactory. It is suggested that this method be also adopted for cases of vault prolapse that may develop after a total abdominal hysterectomy. Although the immediate result of this operation in curing vault prolapse appears to be very good, the long term prognosis must be guarded, for as Te-Linde (1962) has correctly pointed out a few years of wear and tear are required before the ultimate result can be evaluated.

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