

An evaluation of the Vaginal Hysterectomy-Repair Operation for utero-vaginal prolapse

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THE MODERN TREATMENT of uterovaginal prolapse is operative repair, with or without vaginal hysterectomy. Generally, the choice is between the Manchester Operation and Vaginal Hysterectomy-Repair Operation. In the past ten years, Vaginal Hysterectomy-Repair has been adopted by the University Unit at the Kandang Kerbau Hospital for Women, Singapore, as the method of choice in the treatment of multiparous women with uterovaginal prolapse, in whom there was no further need for childbearing. This has been the policy in the unit, irrespective of whether there was a coincidental medical indication requiring hysterectomy.

The present study was undertaken with a view to evaluating the long-term effects and operative results in a series of 110 cases treated by this method.

Method of Vaginal Hysterectomy-Repair

The operations were performed by three consultants and five senior registrars of the unit. The essential steps of the operation conform to those described in Bonney's Gynaecological Surgery, with these distinctive features:

- (1) The suture material used for the pedicles is usually linen.

- (2) The stamps of the cardinal ligament and the uterine pedicles are stitched to the vaginal vault in the mid-line.

Preoperative anatomical status

Of the 110 cases, 14 had procidentia, 62 had second degree uterine descent and 34 first degree descent. Ninety percent of the cases were associated with some degree of cystocele and 60 per cent were associated with rectocele. Enterocoele was noted in only six patients.

The follow-up investigations

Routine post-operative examination was carried out six weeks after operation. All the 110 cases were seen at this time. In order to assess the long-term results, these patients were recalled for further examination. Forty-eight cases returned and were personally examined by the author.

Immediate post-operative complications

Sixty-five out of 92 cases (i.e. 70%) had a fever of 100 F or more for two or more days during the post-operative period. The causes of the fever are given in table I.

VAGINAL HYSTERECTOMY—REPAIR OPERATION FOR UTERO—VAGINAL PROLAPSE

Table I

Causes of fever

Cause of Fever	No. of Cases	Percentage
Urinary infection	37	57
Pelvic peritonitis	1	1.5
Chest infection	1	1.5
No apparent cause	25	39
Total:	65	

Haemorrhage

Intraperitoneal haemorrhage occurred once in this series. The patient went into shock six hours after vaginal hysterectomy. At laparotomy, six pints of blood was found in the peritoneal cavity resulting from the slipped right uterine pedicle. Haemostasis was secured by ligation of both internal iliac vessels. The post-operative recovery was uneventful.

Anatomical and Functional results (Late)

At six weeks post-operative examination, no complications were noted, except for the finding of symptomless vault granulations in 11 cases.

A more detailed analysis of the long-term results of surgery on 48 patients who were examined more than six months after the operation is presented. Seventeen patients were seen between six months to one year after operation and 31 patients were seen between one to three years after the operation.

Vault prolapse

There were two cases of vault prolapse. One developed four months after the operation and a vault slinging operation was carried out with good result after 1½ years. The other patient was symptomless and was sexually inactive.

Enterocoele, Cystocoele and Rectocoele

There were six cases (12 per cent) of symptomless small enterocoele. Recurrent cystocoele occurred in six cases (12 per cent) of which five were mild and one marked. Rectocoele was found in six cases (12 per cent). All of them were mild.

Stress Incontinence

Stress incontinence was found in two patients; one had it before operation and one occurred after the operation. As there were eight cases of stress incontinence in the 48 cases, the cure rate of stress incontinence would be 88 per cent.

Functional result

Of the 48 patients, coitus was satisfactory in 22 and unsatisfactory in five. Twenty-one had stopped coitus even before operation. Of the five cases who had coital difficulty, two had stenosis of vagina and one vault prolapse. One complained of "dryness" during coitus and the remaining refused coitus because of fear of pain even though the anatomical result was satisfactory. From this investigation, it was found that the two cases of vaginal stenosis and the case of vault prolapse with dyspareunia were attributable to surgery.

Discussion

Although many operative procedures have been devised for the surgical treatment of uterine prolapse, only the Vaginal Hysterectomy-Repair operation and Manchester Operation are commonly employed. Over the last quarter century, the Vaginal Hysterectomy-Repair operation has become increasingly popular for the following reasons:-

- (1) The potential source of uterine disease, menstrual disorders and malignancy, is removed.
- (2) The anatomical restoration is more effective than that of the Manchester Operation. This reduces the recurrence rate.

The late results of the operation may be considered in two aspects, anatomical and functional. Anatomical failure may be said to occur when vault prolapse, stenosis or shortening of vagina occurred as a result of operation (Table II). Functional failure may be said to occur when coital difficulty developed after operation.

Table II

Anatomical results

	No. of Cases	
	Sexually inactive	Sexually active
Shortening of vagina (3 inches or less)	6	0
Stenosis of vagina (1½ finger breadths or less)	0	2
Shortening and stenosis	7	0
Vault prolapse	1	1
Total:	14	3

Although there was a 12% recurrence rate for enterocele, cystocele or rectocele, none of these produced any symptoms in this series. However, in other series recurrent enterocele appears to contribute significantly to the anatomical and functional failure rate.

Anatomical failure by definition (including vault prolapse), occurred in 35 percent (17 cases). However, 13 of these were sexually inactive, and in these cases, the operator usually deliberately narrowed the vagina to prevent recurrence of prolapse. Taking this into consideration, the corrected anatomical failure rate would be 8%.

For those who are sexually active, it is the functional result that matters most. From our series, it may be said that there was a functional failure rate of 11% (three cases) and another 7% (two cases) with partial failure as no anatomical reason could be found for the coital difficulty. Watson and Jeffcoate, in two separate series, found that 21% of their cases who were sexually active had dyspareunia; however, only 13% had anatomical reasons.

These failure rates should not be taken lightly and it is felt by the author that the Vaginal-Hysterectomy-Repair Operation should not be carried out for symptomless prolapse, as it has a substantial risk of causing coital difficulty. In order to prevent failure due to vaginal stenosis, it is important to note whether coital function is needed and if so, care should be taken not to excise too much vaginal mucosa. It is better to excise too little than too much in such cases. It may be possible to prevent vault prolapse by

stitching the vault to the cardinal ligament pedicles and by buttressing the pre-rectal fascia.

Conclusion and Recommendations

Although the Vaginal Hysterectomy-Repair Operation is now an established gynaecological operative procedure, it has been shown to carry a high morbidity rate and a substantial functional failure rate. As such, this operation should not be carried out for symptomless prolapse. The failure rate may be reduced by taking care not to excise too much vaginal skin, stitching the vault to the cardinal ligament pedicles and buttressing of the pre-rectal fascia.

References

1. Hawksworth, W., Roux, J.P. (1958): *J. Obstet. & Gynaec. Brit. Emp.* 65: 214.
2. Hawksworth, W. (1965): *J. Obstet. & Gynaec. Brit. C'wealth.* 72: 847.
3. Watson, P.S. (1963): *J. Obstet. & Gynaec. Brit. C'wealth.* 70: 29.
4. Howkins, J. (1948): *Proc. Roy. Soc. Med.* 41: 476.
5. Stirling, H. (1965): *J. Obstet. & Gynaec. Brit. C'wealth.* 72: 851.
6. Steptoe, P.C. (1965): *J. Obstet. & Gynaec. Brit. C'wealth.* 72: 862.
7. Laman Gray (1963): Vaginal Hysterectomy.
8. Krige, C.F. (1965): Vaginal Hysterectomy and Genital Prolapse Repair. Witwatersrand University Press, Johannesburg.
9. Francis, W.J.A., Jeffcoate, T.N.A. (1961): *J. Obstet. & Gynaec. Brit. C'wealth.* 68: 1.
10. Menon, R. (1970): *The Med. J. of Malaya Vol. XXIV* No. 3. The place of vaginal hysterectomy in the management of genital prolapse.