

# Review of vault prolapse after hysterectomy (abdominal and vaginal) at PMCH, Patna during the year 1991-96.

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**Summary :** The role of surgery in cases of vault prolapse after hysterectomy was evaluated. Twenty five cases were studied. Of these 60% were above 50 years of age. Enterocoele was present in 64% cases. Sacral colpopexy was done in 24% cases & 66% of these required simultaneous repair of cystocoele and pelvic floor. It was observed that colpopexy, both sacral and sacrospinous, gave an encouraging 100% success rate on follow-up.

Vault prolapse is a preventable complication. Factors in its etiology should be recognized and eradicated preoperatively. However, colpopexy secures effective and sustained vault support.

## Introduction

With dramatic increase in life expectancy, an increasing number of women with vault prolapse, after hysterectomy, are seen. This, unfortunately is a distressing complication for patients, who have expectation of effective therapy as well as the maintenance of coital function and body image.

## Material and Methods

Twenty five women with vault prolapse admitted from gynaecological OPD after abdominal or vaginal hysterectomy, done at an hospital or outside, who underwent repair, abdominally or vaginally, from 1991 to 1996, at Patna Medical College Hospital, Patna, were retrospectively analysed with the purpose of finding the role of surgery.

## Observations

### 1. Age distribution

In our study, the youngest patient was 35 years old, while the oldest was 67 years of age. 60% cases were above 50 years (Table - 1)

Table 1

Vault prolapse according to age		
Age (in years)	Number	Percentage
35-39	4	16
40-49	6	24
50-59	8	32
60-67	7	28

60% cases were above 50 years of age

### 2. Type of prolapse

Enterocoele was present in 64% cases. Of these 36% were of asymptomatic, small type, found on examination. Enterocoele alongwith cystocoele and rectocoele was found in 24% cases. Eversion of vagina was present in only 12% cases (Table - II)

Table II

Type	Type of prolapse		
	Number	Percentage	Abbrev.
Small Enterocoele	9	36	A
Big Enterocoele	7	28	B
Cystocoele + Rectocoele + Enterocoele	6	24	C
Eversion of vagina	3	12	D

Commonest type of prolapse seen was enterocoele (64%).

### 3. Duration of appearance of vault prolapse

44% cases presented within 6 months of hysterectomy, the commonest (63%) being small enterocoele. 12% cases presented after 5 years, all (100%) being eversion of vagina (Table - III)

Table 3

Duration	Duration of appearance of vault prolapse after hysterectomy				Total	%
	Type					
	A	B	C	D		
Within 6 months	7	1	3	0	11	44
6 months - 2 year	0	2	2	0	4	16
2 years - 5 years	2	4	1	0	7	28
more than 5 years	0	0	0	3	3	12

44% cases appeared within 6 months

4. Type of surgery done previously

68% cases were seen after abdominal hysterectomy; 32% had simultaneous pelvic floor repair. In cases where abdominal hysterectomy was done alone, more than 50% had enterocele, rectocele and cystocele. After vaginal hysterectomy, 62.5% cases came with big enterocele (Table - IV).

**Table - IV**

Type of Hysterect	Type of surgery previously done				Total	%
	A	B	C	D		
AH	1	2	4	2	9	36
AH + PFR	6	0	2	0	8	32
VH	2	5	0	1	8	32

44% cases appeared within 6 months.

5. Type of repair operation done

Colporrhaphy alone was done in 40% cases. 90% of these, (9 cases) had a small enterocele only. Partial colpectomy with pelvic floor repair was done in 28% cases. Most were in the older age group and sexually inactive. Sacral colpopexy was done in 24% cases - 66% of these required simultaneous repair of cystocele and pelvic floor (Table - V).

**Table V**

**Type of repair operation done**

Type of Repair	Type of Prolapse				Total	%
	A	B	C	D		
Colporrhaphy	9	1	0	0	10	40
Partial colpectomy with repair	0	2	2	3	7	28
Sacral Colpopexy	0	2	4	0	6	24
Sacrospinous Colpopexy	0	2	0	0	2	8

Sacral colpopexy was done in 24% cases. 66% of these required simultaneous repair of cystocele and pelvic floor repair also.

6. Result of repair operation

Colpopexy, both sacral as well as sacrospinous gave an encouraging 100% success rate on follow-up upto one year.

Partial colpectomy, although considered obsolete nowadays, gave 71% success rate. Stress incontinence must be ruled out beforehand. One case developed SUI. Colporrhaphy alone gave a low 60% success rate (Table VI)

**Table VI**

**Result of repair operation**

Surgery	Number	Success (%)
Colporrhaphy	10	60
Partial colpectomy with repair	7	71 (one case of SUI)
Sacral colpopexy	6	100
Sacrospinous colpopexy	2	100

Colpopexy, both sacral and sacrospinous, gave an encouraging 100% success rate on follow-up.

**Discussion**

In the 25 cases of vault prolapse reviewed, 60% cases were seen to occur after menopause. This could be related to pelvic cellular tissue changes produced by hormone deprivation and previous surgery. (Zacharin, 1980)

The various anatomical defects require accurate clinical assessment for successful repair. 64% cases with enterocele alone, had previously undergone anterior and posterior repair without adequate vault support.

In cases of small enterocele, only colporrhaphy sufficed, while those with large enterocele required vault supporting procedures also (60%).

Ridely (1972) Claimed that colpectomy results in recurrent vaginal prolapse. we have found partial colpectomy to be a quick and effective procedure in elderly, sexually inactive subjects. Stress incontinence must be looked for and treated before resorting to repair operation.

44% cases reported with symptoms in 6 months. In these cases, the enterocele had been overlooked by a junior surgeon. Vault prolapse follows vaginal and abdominal hysterectomy in equal numbers (Symmonds & Pratt 1960). Its occurrence indicates a wrong choice of cases, where abdominal hysterectomy is performed in the presence of marked uterine descent, without adequate posterior colporrhaphy.

Extreme old age, obesity, chronic constipation, chronic cough poor tone contribute to vault prolapse at a later date. Use of vaginal oestrogen cream and treatment of ulceration improve tissue quality, facilitating surgery and improving results.

The wide range of surgical options available are shown in Table V. Colporrhaphy had a success rate of only 60%. Symmonds et al (1981) claimed good results in 89% cases.

Although, our series of colpexy operations, is small (32%), we have found it highly encouraging (100% success). Our results tally with those of Nichols (1982) at 95% success in 104 cases of sacrospinous colpexy and with those of Timmons et al (1992) at 98% success rate for trans-abdominal sacral colpexy.

We have suspended the vault from the sacral promontory using two sutures of Ethilon loop No.1-0. In case of transvaginal repair, the Ethilon loop suture No.1-0 was used to suspend the vault midway between the ischial spine and the body of the sacrum, avoiding the pudendal

nerves and vessels. A generous dissection of the rectovaginal space was required.

## Conclusion

Vault prolapse is a preventable complication and its occurrence indicates failure to recognize and eradicate factors in the etiology of vault prolapse, preoperatively.

Inappropriate choice of operation also contributes to this complication. Both abdominal sacral colpexy as well as transvaginal sacrospinous colpexy secure effective and sustained vault support.

Unfortunately, it was not possible to follow-up all cases of hysterectomy for long periods, and cases of vault prolapse where surgery had been outside were also referred to us.

## References

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