

SURGICAL TREATMENT OF GENITAL PROLAPSE IN YOUNG WOMEN

(With Stress on Shirodkar Sling Operation)

by

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Young women with genital prolapse belong to two groups. Those who have completed their families, even at as early an age as 30 years and are willing to be sterilized at the same time that the prolapse is being repaired; others are young and have developed uterine prolapse after one or two deliveries and desire to have more children. The first group does not pose any problem, as it can be treated by operations which can be performed according to the type and degree of prolapse. It is the second group in whom child bearing function is to be maintained that the gynaecologist faces a problem. The selection of operation in this group must be such that it should neither interfere with conception nor pose difficulty during labour. At the same time, the repair operation should stand the stress and strain of pregnancy and labour and the prolapse should not recur. In the past few years, two abdominal operations have been devised specially for this group of patients; one is the cervicopexy of Purandare and the other is sling operation devised by Shirodkar in 1958.

In the cervicopexy operation, the uterus is supported by transverse strips of anterior rectus sheath attached to the front of the cervix in the region of the isthmus. In the sling operation, as performed today, use is made of 1/8 inch wide nylon

tape which passes through the posterior surface of the cervix in the region of the attachment of the uterosacral ligaments and goes subperitoneally backwards to the promontory of the sacrum where it is fixed through the anterior longitudinal ligament. On the left side, to avoid pelvic colon being kinked, use of psoas loop is made and care is also taken to keep the ureter lateral to the strip. The first operation is comparatively simpler than the second. However the anatomic results of sling operation are better than those of cervicopexy.

Though the sling operation was first performed in 1958, it is not as popular as it should be as is seen from the lack of reports in the literature. A review of 250 cases of sling operation performed during the period of 14 years from July 1958 to July 1971 was reported by Dastur. In fact, at the Cama and Albles Hospitals, this operation was first performed towards the end of 1968. Being fascinated by the results of this operation, young patients with genital prolapse coming to this hospital, were carefully selected for treating with sling operation.

Material and Methods

This is a study of 110 young patients with genital prolapse, who were admitted to one of the four gynaecological units at Cama and Albles Hospitals during the period of 5 years from February 1969 to March 1974. The type of operation to

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be performed was decided according to the age, parity, degree of prolapse including associated vaginal wall prolapse and elongation of cervix. Those patients who desired to have further children were selected for the sling operation, if they fulfilled the criteria required, viz., uterine prolapse of any degree with a moderate elongation of supravaginal portion of cervix up to 4" of total utero-cervical length, a small cystocele. Rectocele can be treated at the same time after the sling operation is completed. Even a big cystocele may be treated per vaginam first and sling operation performed later. If the vaginal portion of the cervix is elongated, then it needs to be amputated as otherwise, it protrudes from the introitus even after corrective procedure. In this series sling operation was done on 35 patients. In 7 of them sterilization was also done. Though this operation is mainly for young patients desiring further children, these patients otherwise fulfilled all the necessary criteria and hence the operation was done more as a practice. Cervicopexy operation was done only on 2 patients, as the sling operation was first started in those days and more cases were needed for the trial. Table I shows the

TABLE I
Types of Operations

Vaginal:	
1. Anterior colporrhaphy with post. colpoperineorrhaphy	12
2. A.P. repair + sterilization	8
3. Fothergill's	18
4. Fothergill's + vag. sterilization	6
5. Amputation of cervix + posterior repair	3
6. Enterocoel repair	1
7. Mayo-Ward hysterectomy	24
Abdominal:	
1. Sling + plication of round lig.	35
2. Cervicopexy	2
3. Ventrisuspension	1

various types of operations carried out in this series.

Selection of Cases

(1) 50% of the patients were below the age of 30 years. In this age group, abdominal operations viz. sling and cervicopexy were done in 32 cases, and vaginal operations in 20 cases. In the patients above 30 years of age, abdominal operation was done in 7 cases only, whereas vaginal route was preferred in 52 cases. This is so because in most of them family was complete and hence either vaginal hysterectomy or Fothergill operation with sterilization could be done.

Parity

(2) There were 6 nulliparous patients and in all of them sling operation was performed. Sixty-five cases had 1 to 3 children and in this group abdominal operation was done in 29 cases and vaginal in 36 cases. Of the 2 cervicopexy operations, 1 patient was also sterilized, as she had 4 children; the other 1 had only 1 premature delivery. Sling operation was not done in cases with parity higher than 6.

Degree of Prolapse

(3) In the patients operated vaginally, there were 17 cases with 1st degree, 21 cases with 2nd degree, and 23 cases with 3rd degree uterine prolapse. In 11 cases, the degree of prolapse was not recorded. Table II shows the type of operation performed according to the degree of uterine prolapse.

There was no case of procidentia in the series. Vaginal wall prolapse is almost always associated with uterine prolapse. In this series, there was vaginal wall prolapse in 94 cases. In 55 cases there was associated elongation of the cervix. En-

TABLE II

Operation	Degree of uterine prolapse				
	I	II	III	Proci- dentia	Unknown
A. P. Repair	6	6	—	—	—
A. P. + Vaginal sterilization	5	2	—	—	1
Fothergill's	2	6	7	—	3
Foth. + Vaginal sterilization	—	2	3	—	1
Amp. of cervix + posterior repair	—	1	2	—	—
Enterocoele repair					
+ post. repair	—	—	—	—	1
Mayo-Ward hysterectomy	4	4	11	—	5
Sling	8	14	10	—	3
Cervicopexy	—	1	—	—	—
Cervicopexy + steriliz.	1	—	—	—	—
Ventrisuspension	—	—	—	—	1

terocoele was present in one patient on whom vaginal repair was done. In one patient on whom sling operation was done, pouch of Douglas was noticed to be very deep and therefore Moschowitz operation was performed at the same time. Table III shows the associated vaginal wall prolapse and presence of elongation of cervix in the two groups of cases.

stress incontinence, buttressing procedure in the region of the bladder neck was carried out per abdomen, and she was relieved of symptom after the operation.

Previous Repair Operation for Genital Prolapse

In 2 patients there was a history of repair operation prior to admission. In the

TABLE III
Associated Prolapse

Nature of operation	Cystocoele		Rectocoele		Elongation		Enterocoele	
	No.	%	No.	%	No.	%	No.	%
Vaginal	72	65.45	72	65.45	36	32.72	1	0.90
Abdominal	22	20.00	8	7.27	19	17.27	—	—

Symptomatology

Besides the common complaint of vaginal protrusion, about 25% had excessive vaginal discharge and backache. 16% of the cases were sterile 24% of the patients had menstrual complaints such as irregular menses, menorrhagia, dysmenorrhoea. Disturbances of bladder function was complained of by 20% of the cases and 5 patients had stress incontinence. In one patient in sling group, who had

abdominal series, 1 patient had cervicopexy operation done 3 years previously and another patient had Fothergill's repair done 15 years prior to admission. In both sling operation was performed with good anatomic results.

Operative Technique

The techniques used for various operations were the standard ones. For sling operation, 1/8" nylon tape was used and

it was attached to the posterior wall of the uterus in the region of attachment of uterosacral ligaments. Plication of round ligaments was also done in all cases.

Results

There was no mortality in this series of 110 cases. The morbidity rate was however high in vaginally operated cases than in abdominally operated ones. Vaginal, perineal and urinary infection was commoner in the first group. Two patients on whom Fothergill's operation was done required blood transfusion. Two vaginally operated patients had developed paresis of lower limbs which was attributed to prolonged lithotomy position during the operation. In one of these cases general anaesthesia was given, which excludes spinal anaesthetic as an aetiologic factor. Both patients recovered subsequently with physiotherapy and vitamin B complex injections.

In sling series, 2 patients developed genitofemoral nerve irritation which gradually disappeared. No other known complications of sling operation were noticed in this series.

Hospital Stay

Average stay in the hospital for abdominally operated cases was 12.7 days and for those cases operated vaginally it was 16.7 days. This is explained by the higher morbidity rate in vaginally operated cases.

Anatomic Results

In all sling operation patients uterus was anteverted and cervix directed posteriorly and well held up except in one patient in whom the cervix was low in the vagina as there was elongation of the vaginal portion of the cervix. In the 2

cases of cervicopexy the cervix was held up well and it was pulled up further on coughing. It was not however directed posteriorly. The uterus was also retroverted. In Fothergill's series, the cervix was almost flush with the vagina and the vaginal flaps covering the amputated cervix retracted in many. The cervical os was also very small.

Follow Up

As peculiar to all general hospitals, long term follow up is very difficult. All sling cases were advised to report to the hospital during pregnancy and to have hospital delivery. The patients are usually worried about subsequent pregnancy and labour following abdominal operation, whereas vaginal repair operation is not taken seriously. Hence, some data could be collected in abdominally operated cases. Out of 38 cases, 7 patients came during pregnancy and labour; one was a cervicopexy patient and 6 were sling cases. Five patients following sling operation had full term vaginal delivery. One case developed rectus sheath haematoma at 38 weeks of pregnancy and incisional hernia after delivery. There was no recurrence of prolapse after delivery in any. One patient is pregnant 4 months at the time of writing this paper. The cervix is well held up and she has no prolapse. One case of cervicopexy conceived 2 years after operation and came with uterine prolapse at seven months and delivered prematurely. She conceived again within a year and came at seven months with oedematous cervix lying outside introitus. This time also she delivered prematurely and both the babies were lost. This patient has both vaginal and supravaginal elongation of cervix, which during the non-pregnant state is just within the introitus.

Conclusions

Sling operation was performed on 35 patients with good anatomic results. There was no recurrence of prolapse after pregnancy or labour. The operation did not prevent in any way normal vaginal delivery. Vaginal operations were performed on 72 patients. The anatomical results were good in this series. Post-operative follow up however could not be done and comparative study could not be completed. During the study it was found that:

(1) 50% of the patients with prolapse were below the age of 30 years.

(2) More than 50% of the patients had less than 3 children, and 6 patients were nulliparous signifying congenital weakness of the supports.

(3) Postoperative morbidity was less after sling operation.

(4) There was no recurrence of prolapse during pregnancy or following labour after sling operation.

(5) Sling operation did not interfere

with the dilatation of the cervix during labour.

(6) With posterior sling operation, the lower segment and cervix can be easily approached in case of an obstetric indication for lower segment caesarean section. Though not encountered in this series, difficulty in such exposure has been experienced after cervicopexy operation.

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