

## ABDOMINAL CERVICOPEXY AND GENITAL PROLAPSE IN YOUNG WOMEN †

by

V. T. PARMAR\*, M.D., D.F.P.

A. V. PANCHAL\*\*, M.B.B.S.

and

J. H. FONSECA\*\*\*, M.D.

Genital prolapse is one of the major complaints encountered in our gynaecological practice. The complex nature of the problem of prolapse is evident from the fact that more than a dozen different types of operations are devised to cure this condition. In fact, no subject has evoked more discussion and inconclusive debate than "the surgical treatment of prolapse of uterus". The treatment is less satisfactory in young patients, as preservation of menstrual and childbearing functions limits its application.

Almost a decade has passed since B. N. Purandare devised the operation of abdominal cervicopexy for the treatment of genital prolapse. The operation is being performed by many of us. There are those who question the validity of the operation. The literature on the operation is scanty—may be because of its recent origin. Therefore, it was de-

vised to study the various aspects of the operation and its role in the treatment of genital prolapse.

### *Material and Methods*

This study comprises the operations performed at the Lokmanya Tilak Municipal General Hospital, Sion, Bombay, and covers the seven year period from the beginning of 1959 to the end of 1965. There were 818 various types of operations performed for genital prolapse. (Table I). Abdominal cervicopexy was performed 135 times, giving an incidence of 16.50%. The incidence for the Manchester type of operation and Shirodkar's vaginal repair was 7.35% and 3.13% respectively.

It is to be noted that each case was evaluated separately, considering the various factors affecting the line of treatment; for the description of prolapse Wilfred Shaw's classification was adopted.

### *Age*

Ninety-six of 135 cases i.e. 71% belonged to the age group of 21-30 years, a period of maximum fertility. Five cases were aged 35 years or more but they insisted on preservation of

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\* Registrar. \*\*House Surgeon.

\*\*\*Hon. Obstetrician & Gynaecologist. Lokmanya Tilak Municipal General Hospital, Bombay.

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TABLE I

Total Number of Operations performed for Genital Prolapse during the period of the study (7 years).

Operation.	No.	Incidence.
1. Abdominal Cervicopexy ..	135	16.50%
2. Manchester Operation	61	7.35%
3. Mayo-Ward's Repair	335	40.85%
4. Le Forte Operation	10	1.12%
5. Anterior Colporrhaphy and Colpoperineorrhaphy	250	31.05%
6. Shirodkar's Vaginal Repair	27	3.13%
Total	818	100.00%

the uterus for one or other reason. The average age of the patient at the time of operation was 26 years.

### Parity

In 48 cases genital prolapse had occurred following one vaginal delivery, in 39 following two and in 30 cases following 3 or more deliveries. There were 18 nulliparous patients. The average parity was 1.8, excluding nulliparous cases.

### Complaints

Main complaint suggestive of genital prolapse was present in 108 patients i.e. 80% of cases. The rest of the cases presented with the leading complaint of backache, vague pain in abdomen or leucorrhoea.

Sterility was also a major complaint. There were 79 cases of primary sterility and 61 of secondary sterility.

### Types of prolapse

Ninety cases (66.66%) had second degree descent of cervix (Table II). In 10 cases it was of first degree and in 22 cases of third degree. Procidencia was present in 7 cases and elongated hypertrophied cervix in 6 cases. Fifty-two cases had associated

TABLE I  
Types of Prolapse

Type.	No. of cases.
Prolapse of cervix—	
1st Degree	10
2nd "	90
3rd "	22
Procidencia	7
Elongation and hypertrophy of cervix	6
Associated cystocele	52
Associated rectocele	25

cystocele and 25 had associated rectocele.

Barring 6 cases of elongated hypertrophied cervix all other cases had utero-cervical length of not more than 3½ inches.

### Operative technique

The operative technique has been well described by Purandare *et al* (1966). Important steps are that a transverse incision is taken; two fascial slings for anchoring on the cervix are prepared from the anterior rectus sheath so that the lateral abdominal muscles by their contraction pull up the uterus when the patient strains. Plication of round ligaments and advancement of the bladder peritoneum help to maintain the uterus in an anteverted position and reduce cystocele if any.

### *Follow-up*

The follow-up period varied from one to seven years. Fifty-one out of 135 cases, 37.31%, could be followed up.

### *Effects of operation on fertility*

Of the 51 cases followed up, there were 14 cases who had sterility before the operation of cervicopexy. Two had primary type of sterility and 12 had secondary type. Of these 14 cases, post-operatively 3 had full-term normal deliveries and one had an abortion. Ten cases did not conceive.

Of the 37 cases who had conceived preoperatively, 11 had full-term normal deliveries, one had a lower segment caesarean for an obstetrical indication and 2 had abortions following the operation of cervicopexy. Twenty-three, 62.16% of the cases did not conceive following the operation.

Out of these 23 cases, 4 had blocked tubes (as proved radiologically), 4 had chronic pelvic infection, 2 were deserted by their husbands, 3 were nearing menopause, one had undergone operation of sterilization and 2 were using contraceptives.

Thus in seven, 18.5% of cases who had conceived prior to the operation of cervicopexy, no demonstrable cause for the post-operative sterility could be detected by routine investigations.

### *Recurrence of prolapse*

There was no recurrence of prolapse during pregnancy or labour. In eight cases it recurred postnatally or otherwise. It is interesting to note that 7 of them had domiciliary confinements.

In 41, 80% of the cases the cervix was well suspended and the remaining 20% of the cases had second degree descent of the cervix. Rectocele recurred in 7 and cystocele in 8 cases. Enterocele occurred in one. The posterior lip of the cervix in this case was longer and hypertrophied, mainly because the anterior lip was held up by the anchoring fascial strips. (Fig. 1).

### *Other symptoms*

Eight cases complained of backache where no definite cause could be found. There was no significant change in the pattern of menstrual cycle of any of the patients followed up. None complained of dyspareunia.

Ten cases had keloid formation of scar. But there was no case of herniation of the incision.

### *Discussion*

The ideal operation for genital prolapse in childbearing age should have two objectives: (i) It should provide adequate support to the uterus, and (ii) it should not affect future childbearing.

### *Anatomical results*

From the examination of the follow-up cases in the present study, it was noted that in the cases where recurrence was absent, the cervix sometimes was difficult to visualize on speculum examination and the posterior fornix was very wide, as the cervix was found to be right behind the symphysis pubis with the uterus in a retroposed state. In a normal case the uterus is in the centre of the vaginal vault, the cervix lying at the

level of the ischial spines and the posterior fornix is not unduly broad. Thus the anatomical results of the operation are not very sound though the operation effectively prevents genital prolapse. The broadening of the pouch of Douglas may aggravate an already existing enterocele and so its preoperative detection and correction is mandatory.

### *Physiological Results*

#### *(a) Effect of operation on fertility*

As stated already, in the present series out of 51 cases followed up, 18 had conceived following the operation; 10 had pre-existing sterility and in 16 cases no conception was possible for various reasons such as blocked tubes, pelvic infection etc. In the remaining 7 cases the cause of the post-operative sterility could not be ascertained by routine investigations. Thus the incidence of post-operative sterility was 13.73% as compared to 8% reported by Purandare *et al* (1966). Five of these seven cases showed the presence of migratory sperms following post-coital (Sims Huhner) test. The other two repeatedly recorded negative post-coital test.

From the few cases in which post-coital test has been done, it is difficult to decide if pulling the cervix behind the pubic symphysis from the pool of semen in the posterior fornix could be the cause of absence of sperms in the cervix. It can, however, be concluded that the operation does not have undersirable effect on subsequent fertility. This is in contrast to the Manchester operation — the operation commonly employed

to repair genital prolapse in young women in western countries — which definitely affects the subsequent fertility adversely. (Hunter, 1957).

#### *(b) Effect of operation on pregnancy and labour*

The operation does not affect pregnancy and labour adversely. Purandare *et al* (1966) had the same incidence for premature deliveries before and after the operation.

We had encountered certain difficulties during the operation of lower segment caesarean section, only one of its kind performed at term for cephalopelvic disproportion. They were as follows: (i) due to adhesions it was difficult to define the lower uterine segment, (ii) the bladder which was advanced during the operation of cervicopexy had to be separated cautiously, (iii) the incision on the lower uterine segment had to be taken higher up so as not to disturb the repair of the prolapse.

Not a single case of rupture of uterus or cervical dystocia was recorded.

#### *(c) Effect of vaginal delivery on repair*

Of the 14 cases who delivered normally per vaginam 8 had prolapse postnatally or otherwise. Seven of these eight cases had home deliveries. The other seven cases had delivered in the hospital under proper supervision and only one developed recurrence of prolapse. Thus in order to minimise the recurrence of prolapse it is necessary to have expert supervision for the labour subsequent to the repair.

In conclusion, our impression is that the operation of abdominal cervicopexy is a useful surgical procedure to correct genital prolapse in young women. Though post-operative anatomical results are not very sound, it effectively cures the prolapse without adversely affecting subsequent fertility, pregnancy or labour and, therefore, has a distinct advantage over the Manchester operation. One should not attempt this repair when there is procidentia, stress incontinence, lacerated infected cervix or marked cystocele. It is, however, suitable for first or second degree of cervical prolapse (Shaw's Classification), small cystocele and nulliparous prolapse where there is congenital weakness of ligamentous support.

#### Summary

1. One hundred and thirty-five cases of abdominal cervicopexy operated at the Lokmanya Tilak

Municipal General Hospital, Bombay, during a period of seven years are critically reviewed.

2. The follow-up results of 51 cases are presented.

3. Various anatomical and physiological results of the operation are discussed.

4. It is concluded that the operation has got a definite place in certain selected cases of genital prolapse in young women.

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#### References

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*Fig. on Art Paper I*