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Clinical study of utero-vaginal prolapse

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Abstract

Introduction: Present study was undertaken to study the incidence of Uterovaginal prolapse. Also studied its relation with age, parity, etiological and predisposing factors. Also the factors like clinical-presentation (i.e. patient's presenting symptoms) duration of disease, degree and components of Uterovaginal prolapse, associated pelvic findings and different modes of treatment studied and post operative follow-up also studied.

Methods: This prospective study "clinical study of Uterovaginal prolapse" was undertaken between February 2017 to May 2018 at D.Y Patil Medical College Pimpri Pune. Total 200 cases of UV prolapse who attended the OPD or admitted in wards of D.Y Patil Medical College were studied. Patients complaining of something coming out of vagina were included in this study.

Results: Maximum incidence of prolapse was between the age of 31 to 50 years which is 53%, in para three and above i.e. 76.50%, cases belonging to lower social economic condition i.e. 85%, and in previous home deliveries i.e. 57.14%

Conclusion: Prolapse can affect any age group but most commonly seen in women with high parity. Majority of cases have obstetric causes like delivery conducted by untrained person at home. Vaginal hysterectomy with pelvic floor repair is the choice of operation performed. Other commonly performed operations are fothergill's repair, Shirodkar's sling operation. Pessary has a limited application in management of prolapse.

Keywords: UV prolapse, SCOV, Vaginal hysterectomy

Introduction

Uterovaginal prolapse is a classic malady which most gynaecologists encounter in their clinical practice. Pelvic organ prolapse have led to establishment of gynaecologic surgery as a separate speciality.

Prolapse-To Fall (Latin). It is known since the time of Hippocrates. Ancient hindu medicine also mentions about it.

Prolapse is in fact a form of hernia and is a serious disability and difficult challenge to the inventive genius and skill of any gynaecologic surgeon who corrects it. The ability to provide a permanent relief of this disabling condition has been used as a parameter to judge the skill and efficiency of gynaecologic surgeons.

The choice of correct operative procedure for anatomic defeat, maintenance and restoration of normal function and anatomy is necessary in management of prolapse.

Though pelvic organ prolapse is more common in older women, it is now seen with an increasing frequency even in the reproductive age group. Conventionally pelvic organ prolapse has been attributed to child birth conducted by untrained personal but factors like obesity, respiratory conditions, constipation act as aggravating factors.

The evaluation of prolapse requires comprehensive approach. Practically every aspect of genital prolapse from anatomy to the treatment is full of disagreements. Porges and Porges (1960) [1] consider the levator -ani muscle and the presence of pelvic valve as the principle support, other consider endopelvic fascia with its condensations to the primary support of the uterus and vagina (Anjaneyalu, 1982) [2].

Treatment of uterine prolapse is another very interesting aspect. Treatment of multiparour meropausal woman seems to be more or less standardized, but operative treatment of genital prolapse in nulliparous and young woman who have not completed the families is still a problem (Goswami *et al.* 1980) [3].

There are many operations devised for prolapse. But when the efficacy of each procedure is

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considered, there is room for honest difference of opinion. Operative treatment depends upon several factors. The follow-up of post-operative cases involve prolonged observation since recurrence may occur after years of symptom-free interval.

Aims & Objective

To find out incidence of Uterovaginal in hospital-attendance and its incidence in different age groups and common clinical symptomatology of UV prolapse and their etiological and predisposing factors and management of prolapse by careful patient selection and then analysis of various treatment modalities for UV prolapse and also to assess the outcome following operations for Uterovaginal prolapse.

Materials and Methods

The present prospective study was undertaken in D.Y Patil Medical College between February 2017 to May 2018 on 200 cases of Uterovaginal prolapse who attended outpatient department and/or admitted in gynaecological wards of this hospital.

At initial visit detailed history which includes their symptoms related to UV prolapse asked and thorough obstetric history taken.

Next step was thorough physical examination including general and systematic evaluation by Inspection and palpation (specially inspection of perineal area) done. Patient asked to strain; so the muscle tone was evaluated. Then per-speculum examination by using Sim's speculum done to note type, degree of prolapse and condition of cervix, measurement of cervical length was done. Type & grading of various components of prolapse was done. Many classification systems are there but my study is based on Shaw's classification for uterovaginal prolapse.

Then per-vaginal examination done to note uterine size, position, mobility, adnexal mass and infra-vaginal elongation. Per-rectum examination was done to confirm presence and degree of rectocele, status of uterosacral ligaments and presence and degree of chronic perineal laceration. Perineal examination done for deficient perineum, old perineal tears and degree, tone of perineal body and levator-ani. All routine hematological investigations sent. Line of treatment considered depending on patient's condition and other factors. Non-surgical treatment like pessary was considered in patients with large decubitus ulcer, those having ill health and are unfit for surgery, those not willing for surgery or postponing operation for some time. Pregnant patients were not considered in this study. Other non-surgical treatment like Kegel's perineal exercises were advised in cases who had 1st degree UV descent and not willing for surgery. Surgical treatment which were carried out were vaginal-hysterectomy with pelvic floor repair, Shirodkar's modification of fothergill's repair, Anterior-cervicopexy, and posterior sling operation.

Patients for surgical treatment were closely observed throughout the operative and immediate post-operative period. A complete follow-up was possible for a period of one month to one year only in a small number of cases. Patients were asked to inform the institute if they develop new complaint or they conceive or they develop recurrence of prolapse.

Results & Observation

Table 1 shows maximum incidence of prolapse was between age group 31-50 yrs. (53%)

Table 2 shows maximum incidence in para three & above (76.50%)

Table 3 shows maximum patients had previous home deliveries

(57.14%)

Table 4 shows maximum cases were from lower socioeconomic condition (85%)

Table 5 shows acquired weakness of pelvic supports either alone or in combination were found in 90% cases. Among that obstetric causes formed the commonest factor.

Table 6 shows commonest symptom was something coming out of vagina which was present in 100 percent cases.

Table 7 shows maximum cases had symptoms ranging between 2-5 yrs.

Table 8 shows in 47.05 percent cases, prolapse appeared more than 5 years after menopause.

Table 9 shows –In maximum cases, position of uterus was retroverted (81.50%)

Table 10 shows uterine descent formed the most significant component in present study.

Table 11 shows maximum cases had 3rd degree uterine prolapse i.e.61.22%.

Table 12 shows associated pelvic findings, in that maximum cases had supravaginal elongation of cervix, noticed in 66% cases.

Table 13 shows different modalities of treatment given. Majority of cases had undergone surgical treatment.

Table 14 shows –almost 186 operative procedures, in that 132 i.e. 70.96% had vaginal hysterectomy with pelvic floor repair while various forms of conservative surgeries were performed in total 50 cases.

- Most significant post-operative complication was pyrexia seen in total 19 (10.21%) and urinary infection in 3 (6.09%) cases. On follow-up visit there was one case of cystocele recurrence and one case of rectocele recurrence in vaginal hysterectomy with pelvic floor repair and one case of Fothergill's operation had 1st degree uterine descent with cystocele recurrence and one with cystocele recurrence only. One patient of Fothergill's operation conceived but aborted at 18 weeks of gestation. Fourteen patients of Shirodkar's sling operation conceived.2 had normal delivery, 6 underwent caesarean section and 6 pregnant patient did not come for follow up after initial visits.

Table 1: Analysis of age-wise distribution

Age (yrs)	Number of cases	Percentage
<20 or 20	5	2.50
21-30	39	19.50
31-40	63	31.50
41-50	43	21.50
51-60	27	13.50
61-70	20	10.00
71 and above	3	1.50

Table 2: Parity-wise distribution of cases

Parity	Number of cases	Percentage
0 (Nullipara)	4	2.00
1	21	10.50
2	22	11.00
3	69	34.50
4 and above	84	42.00

Table 3: Place of delivery

Place	Number of cases	Percentage
Home	112	57.14
Hospital	47	23.97
Home+ Hospital	37	18.87

Table 4: Socio-economic condition

Condition	Number of cases	Percentage
Lower	170	85.00
Middle	30	15.00

Table 5: Analysis of predisposing and aggravating factors

S. No	Factor	No. of cases	Percentage
1	Acquired weakness of support	180	90.00
a)	Obstetric causes		
	i. Multiparity	175	87.50
	ii. Prolonged labour	60	30.00
	iii. Delivery by untrained person	90	45.00
	iv. Instrumental deliveries	8	4.08
v. Improper puerperal rehabilitation	80	40.00	
b)	Post –menopausal atrophy	85	42.50
c)	Anemia and ill-health	124	62.00
d)	Chronic cough	20	10.00
e)	Constipation	20	10.00
f)	Lifting heavy weight	80	40.00
g)	Pelvic pathology (Fibroid- ovarian tumour)	-	-
2	Congenital weakness of supports	10	5.00
3	No etiological factor evident	10	5.00

Table 6: Presenting symptoms

Symptoms	No. of cases	Percentage
Something coming out of vagina	200	100
Dragging discomfort in lower abdomen	163	81.50
Backache	171	85.5
Vaginal discharge	112	56.00
Menstrual disorders	38	19.00
Constipation	20	10.00
Cough	20	10.00
Urinary symptoms	104	52.00

Table 7: Duration of symptoms

Duration (in years)	No. of cases	Percentage
< 2 yrs	44	22
2-5 yrs	96	48
6-10 yrs	44	22
11yrs & above	16	8

Table 8: Interval between menopause & symptoms

Interval (in yrs.)	No. of cases	Percentage
Upto 2	19	22.35
2-5	26	30.58
>5	40	47.05
Total	85	100

Table 9: Position of uterus in prolapse

Position of uterus	No. of cases	Percentage
Retroverted	163	81.50
Anteverted	17	8.50
Midposed	20	10.00

Table 10: Analysis of components of utero-vaginal prolapse

Parameter	No. of cases	Percentage
Uterine descent	196	98.00
Anterior vaginal wall prolapse	168	84.00
Posterior vaginal wall prolapse	124	62.00

Table 11: Degree of uterine descent

Degree of descent	No. of cases	Percentage
1 st degree	10	5.10
2 nd degree	62	31.63
3 rd degree	120	61.22
Procedentia	4	2.04
Total	196	100

Table 12: Associate pelvic findings

Cervical pathology	No. of cases	Percentage
Cervical elongation	132	66.00
Hypertrophied cervix	58	29.00
Decubitus ulcer	72	36.00
Other benign lesion	46	23.00
Fibroid-polyp	3	1.5
Hyperkeratosis	32	16.00

Table 13: Treatment modalities

Treatment	No. of cases	Percentage
Conservative treatment	Total-14	7.00
-Pelvic floor exercises	4	
-Pessary treatment	10	
Surgical treatment	186	93.00
Total	200	100.00

Table 14: List of operative procedure performed for utero-vaginal prolapse

Operation	No. of cases	Percentage
Vaginal hysterectomy with pelvic floor repair	132	70.96
Fothergill's operation	18	9.67
Shirodkars modification of Fothergill's	4	2.15
Sling operations		15.05
Shirodkar's (poserior sling)	28	
Purandare's (anterior sling) or	26	
Anterior cervicopexy	2	
Vault suspension	4	2.15
Total	186	100

Discussion

The present study "clinical study of uterovaginal prolapse" was carried out in 200 cases during February 2017 to May 2018 at D.Y Patil Medical College Pimpri Pune amongst 1300 gynaecological admissions. Incidence of prolapse was 15.38% in the present study. Satur and Chakravarthy (1955) [4] found an incidence of prolapse 19.38% among 5494 gynaecological cases while Anjaneyalu (1982) [2] reported incidence of 21.56% out of 3422 cases.

One hundred and six (53%) cases belong to age group of 31 to 50 years. 5 cases (2.5%) were less than 20 years, (19.5%) cases belong to age group 21 to 30 years and 50 cases (25%) were more than 50 years old. Majority of patients being more than 40 years old as stated by Chudhari(1973) [5]. In India, however, even advanced degree of prolapse is common at very young age (Purandare *et al.* 1966, Chaudhari, 1983) [6, 7]. So it is seen that prolapse can affect any age group.

In this study, maximum number of cases were para three and above. Thus maximum cases were multipara i.e. 175(87.5 percent). Jeffcoate (1975) [8] found 95 per cent of prolapse cases from multiparous, while Chaudhri (1983) [7] reported an incidence of 89.2 percent from multipara as contrast to 10.8 percent of nulliparous prolapse.

Acquired weakness of pelvic supports in varied combinations were found in 90 percent. Multiparity formed the commonest factor in 175(87.5percent). Other obstetric causes mainly home deliveries, delivery conducted by untrained personnel or unattended deliveries, improper puerperal rehabilitation, prolonged/difficult labour are other factors observed. Other aquired factors like postmenopausal atrophy (42.5%), chronic cough (10%), constipation (10%), lifting heavy weight (40%), anemia and ill heaith (62%) wer present. Seth, Dastur, Sanghavi (1975) [9] in their study found the predisposing factors to be the obstetric causes in 36.84 percent, constitutional factors in 8.77 percent, increased intra-abdominal pressure due to cough in 1.75percent.

In India, where women marry at an early age, prolapse can be seen after bearing one or more children. Due to malnutrition, cases of congenital prolapse are more common.

It is seen that the commonest presenting symptom was something coming out of vagina (scov) in all cases (100%). Other complaints were backache, dragging discomfort in lower abdomen, urinary disturbances and leucorrhoea. Similar observations were made by Das RK(1968) [10] who found that almost all patients complained of something coming out of vagina with sense of pressure.

In the present study, most of the cases had duration of symptoms varying from 2 to 5 years. Duration of 10 years or more had been less frequent. These findings are in accordance with the reported series of Behlo *et al.* (1973) [11].

In this study, 163 cases (81.5%) had a retroverted uterus. If the

uterosacral ligaments are weak, the cervix moves forward and the fundus is left backwards.

Our incidence of II degrees and III degrees uterine prolapse 93.88% correallates to the study of Das (1968) [10], Kerkar (1971) [12], Seth *et al.* (1975) [9] of II degree and III degree prolapse as 95 %, 92.1%, 96% respectively.

Associated pelvic findings were elongation of cervix (65%) where UCL was more than 4 inches, hypertrophied cervix in58 cases (29%) decubitus ulcer was present in 72 cases (38%). Other benign conditions like cervicitis, erosion were found in 46 cases (23%), hyperkeratosis in 32 cases (16%) and fibroidpolyp in 3 patients (1.5%). Supravaginal elongation of cervix is probably a result of tug of war between strong cranial part of the cardinal ligament which pulls the uterus up and the intraabdominal pressure and the relaxed and slaekened caudal part of the ligament and weakened vagina pulls down. Das (1968) [10] reported supravaginal elongation of cervix in 21.3% of his cases.

In this study, various types of treatment modalities were considered which included conservative and surgical treatment. The management was individualized.

Out of 200 patients, conservative treatment was advocated in 14 cases (7 %), either in the form of pelvic-floor exercises or pessary form whereas surgical treatment was advocated in 186 cases (93%).

Selection of operative procedure were dependant on a host of variable factors. Though vaginal hysterectomy with appropriate repair had been the universal choice in patients beyond the age of 40 years, the selection of various conservative surgery were undertaken depending on patient's desire of further child-bearing, parity, type and degree of prolapse, strength of uterosacral and cardinal ligaments, uterocervical length, desire to retain menstrual function and associated pathologies.

Vaginal hysterectomy with repair is the operation of choice.

In this study, Fothergill's operation was done in 18 cases (9.67%). There was no death seen in our series. Kerkar A.V. (1971) [12] did not have any deaths after Fothergill's repair. Morbidity commonly seen with Fothergill's repair is pyrexia, haemorrhage, urinary-infection. Out of 18 patients of Fothergill's repair 11 came for follow-up. Some patients had more than one complaint of something coming out of vagina, leucorrhoea, merorrhagia and dyspareunia. One patient out of 11 patients who came for follow-up, was found to be pregnant but she aborted at 18 weeks of gestation. Kerkar (1971) [12], reported an overall conception rate of 42.5%, abortion rate 26%, live birth rate 73.9%. In this study, number of operations (Fothergill's) performed was very less to coclude anything. But this operation should be done in those with these conditions --

1. Having cervical-elongation
2. Having unhealthy, hypertrophied cervix

3. Who have completed their child bearing or are willing for sterilization.
4. Who have marked cystocele and rectocele

Shirodkar's modification of Fothergill's operation was done in 4 cases (2.15%). No intra-operative and post operative complications were seen. No patient had recurrence of prolapse anatomically. This operation should be done in those patients who have: –

1. I/II degree prolapse
2. Fairly well developed ligaments
3. Healthy cervix
4. No elongation of cervix

In this study, out of 28 total sling procedures, posterior sling operation was done in 26 cases (Shirodkar's posterior sling), anterior cervicopexy in 2 patients. It is seen that by this operation, postoperative morbidity is less, no recurrence is seen and there is no difficulty in conception or delivery.

In this study, two patients undergone anterior cervicopexy, cystocele and rectocele repair from below was done in one case along with anterior-sling. No conception was seen after this operation. As the number of operations performed were very less it is not possible to conclude anything. But Purandare (1966) [6] said that this operation does not interfere with fertility and pregnancy and there is no increase in incidence of operative delivery.

In this study, out of 186 cases in whom operative procedure was done, 132 cases (70.96%) underwent vaginal hysterectomy with pelvic floor-repair. Chaudhury (1973) [5] reported an incidence of vaginal-hysterectomy as 54.2 %. No death was seen in this study. One patient had intraoperative haemorrhage which was due to missed dissecting plane. The average blood-loss according to Macasaet (1974) [13] is 700 cc. Pratt (1981) [14] advised replacement if it exceeds this. Other complications observed were accidental bladder injury in one case, one case had accidental rectal-injury while dissecting a rectovaginal-space during rectocele repair.

Most significant post-operative complication was pyrexia seen in total 19 cases (10.21%) and urinary infection in 13 cases (6.09%). Causes of pyrexia in early post-operative period were mostly tissue reaction to operation, urinary tract-infection and local-sepsis. Copenhaver (1962) [15] reported incidence of post-operative pyrexia as 13% while Chaudhary (1973) [5] reported it as 14.6%.

Out of 132 patients who underwent vaginal hysterectomy with pelvic floor repair, 81 patient came for follow up (duration 1-12 month). They were having following complaints, something coming out of vagina (2), Leucorrhoea (26), Dyspareunia (2), Dysuria (4). In anatomical repair category only one case had recurrence of cystocele and one case recurrence of rectocele.

4 patient of vault prolapse (post hysterectomy) who were operated previously for pelvic organ prolapse referred to our hospital for further management. In 2 cases, abdominal sacropexy along with Burch-colpo-suspension was done as she had urinary incontinence. In 2 cases, bilateral-vaginal-sacrospinous-ligament colpexy was done. No intra or post operative complication was observed.

As stated by Joshi Vivek (1993) [16] post hysterectomy correction of cystocele associated with vaginal eversion can be done with a vault suspension procedure with Burch Colposuspension conveniently.

General measures used to control post-operative complications are; pre-operative correction of anaemia, treatment and cure of infection, proper assessment of patients, and careful selection of

type of surgery to be performed. Pre-operative meticulous attention to detail and strict adherence to the principles of surgery are important. Post-operative antibiotics, regular and systemic examination of patient with due vigilance is necessary for picking up any complication at earliest.

Conclusion

This prospective study shows incidence of prolapse to be 15.38 percent of all gynaecological admissions. Prolapse can affect any age group. Commonly seen in women with higher parity. Commonest presenting symptom being something coming out of vagina. In majority of cases, obstetric causes were common predisposing factors for prolapse. Anemia, ill health, lifting heavy weight were also found to be the commoner predisposing factors. Third degree prolapse was almost commonly seen. Vaginal-hysterectomy with pelvic floor repair was the choice of operation, mostly in perimenopausal & postmenopausal age groups. Fothergill's repair was found to be suitable for patients with elongated or hypertrophied cervix. Shirodkar's (posterior sling) operation gave excellent results in patients having attenuated uterosacral ligaments. Pessary has limited application in management of prolapse. It should be used when a temporary management is considered.

References

1. Porges RF, Porges JO. Mechanisms of uterine supports and the pathogenesis of uterine prolapse. *Obstet Gynecol.* 1960; 15:711.
2. Anjaneyalu R. Genital prolapse. *Post graduate obstetrics and Gynecology* 3rd Ed. 1982, 249.
3. Goswami BK, Sinha Chaudhari S, Lahiri JK. Cervicopexy by Purandare's method and a modified technique. *J Obst Gyn India.* 1980; 30:953.
4. Satur DM, Charavarthy J. A statistical survey of prolapse of the uterus with reference to age and parity. *J Obst Gyn India.* 1955; 6:147-150.
5. Chaudhari SK. Surgical treatment of genital prolapse. *J Obst Gyn India.* 1973; 23:178-183.
6. Purandare VN. Patil Kumud, Arya Rajani: Operative treatment of genital prolapse. *J obst Gyn India.* 1966; 16:53-63.
7. Chaudhary SK. Operative treatment of genital prolapse in young women. *J Indian Med. Ass. Cal.* 1983; 80:167.
8. Jaffeate N. Genital prolapse. *Principle of Gynaecology.* 4th Ed, 1975, 253-267.
9. Sheth Shirish, Dastur Adi, Sanghvi. Abdominal cervicopexy with anterior colporrhaphy and colpoperineorrhaphy. *J Obst Gyn India.* 1975; 25:527-531.
10. Das RK. Surgical treatment of genital prolapse, a review of 200 consecutive cases. *J obst Gyn India.* 1968; 18:116-125.
11. Behlo T, Aron SB, Kotwani BG. Urinary tract changes in genital prolapse. *J Obst Gyn India.* 1973; 23:342.
12. Kerkar AV. Fothergills operation. *J Obst Gyn India.* 1971; 21:748-754.
13. Macasaet MA, Nelson JH. Vaginal versus abdominal hysterectomy: Controversy in *Obst & Gyn II*, 1974, 816-823.
14. Pratt JH. Hysterectomy Vaginal: Complications in *Obst & Gyn surgery*, 1981, 376-388.
15. Copenhaver E. Vaginal Hyst. An analysis of Indication and Complications among 1000 operations. *Am J Obst Gyn.* 1962; 84:123-128.
16. Joshi Vivek. A new technique of uterine suspension to pectineal ligament in the management of uterovaginal sling. *Obstet Gynaecol.* 1993; 81(5):790-793.s