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Original Research Article

Uterovaginal Prolapse- A Study In South Indian Women

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Abstract: Prevalence of uterovaginal prolapse is increasing with increase in life expectancy of women. The reported prevalence of uterovaginal prolapse is different in different countries. Various studies have been reported on the prevalence, determinants, clinical manifestations and treatment modalities of uterovaginal prolapse. The objective is to determine the prevalence of uterovaginal prolapse, identify determinants of uterovaginal prolapse. Retrospective study done on uterovaginal prolapse in Government Rajaji Hospital, Madurai, Tamilnadu in India from 15 April 2016 to 15 August 2016. The Prevalence of uterovaginal prolapse is 1.6%. The mean age of the patients in our study was 49yrs. 60.5 % women with prolapse were post-menopausal. 94% of women were multiparous. The predominant presenting complaint was history of mass protruding out of vagina. Non-surgical treatment was offered for 17%.Ward mayo's surgery was the predominant surgical treatment offered. Post-menopausal state with its hypo estrogenic hormonal milieu adding to the already weakened supports due to prolonged labour and vaginal delivery involving the sphincter and vaginal tear are the main determinants of uterovaginal prolapse.
Keywords: Determinants, treatment, uterovaginal prolapse

INTRODUCTION:

Uterovaginal prolapse is an abnormal protrusion or herniation of pelvic organs from its normal anatomical position in pelvis, due to failure of anatomical support. Prevalence of uterovaginal prolapse is increasing with increase in life expectancy of women. The reported prevalence of utero vaginal prolapse is different in different countries. Infact, the exact prevalence of utero vaginal prolapse is difficult to be determined because many women are asymptomatic and many women feel shy or do not reveal the presence of uterovaginal prolapsed due to social reason. In a population based survey, the prevalence of uterovaginal prolapse has been reported to be 10%.The development of uterovaginal prolapse is multifactorial. Many factors have been attributed to the development of uterovaginal prolapse. Parity and mode of delivery have long been described as important causative factors for uterovaginal prolapse as women following delivery had significantly hyper prevalence of pelvic floor disorders when compared to nulliparous or those delivered by caesarean section. Overweight has also been attributed to increase in the prevalence of uterovaginal prolapse. Postmenopausal state due to hypoestrogenemia and genital atropy play the most important role in the pathogenesis of uterine prolapse in our study. Patients with uterovaginal prolapse present with various symptoms like vaginal hernias or protrusion of mass through the vagina, urinary symptoms, vaginal discharge, vaginal itching, ulceration, impaired sexual dysfunction. Protrusion of mass or hernias in the vagina has been reported as the predominant presenting symptom, next being urinary complaints. Based on the clinical scenario, age of the patient, parity, desire for reproductive functions, desire for preservation of coital function, general medical status and previous corrective surgery the management of uterovaginal prolapse varies. Conservative surgery like Fothergill's surgery is offered to those who wish to preserve their reproductive function. Ward mayo's vaginal hysterectomy with pelvic floor repair is done for those who have completed their family and pessary treatment for, those who are not fit for surgery. Various studies have been reported on prevalence, determinants, clinical manifestations and treatment modalities of uterovaginal prolapse but studies are very limited among Indian women.

AIM:

The aim of this study was to determine the prevalence of utero vaginal prolapse from patient attending gynaecology outpatient department in Government Rajaji Hospital, Madurai from April 15, 2016 to August 15, 2016 and identify determinants of utero vaginal prolapse.

MATERIALS AND METHODS:

The study was a retrospective study done on uterovaginal prolapse at Govt Rajaji hospital, Madurai. It is a tertiary care hospital and medical college catering to health needs of the people of Madurai and also referral centre for nearby districts. Hence the study population in our setting serves as a representative of South Indian women. Among the patients attending OPD in our hospital from April 15, 2016 to August 15, 2016 following data were collected. The information were sociodemographic characteristics (age, parity), determinants of uterovaginal prolapse, presenting complaints, degree of prolapse including POPQ, and treatment modalities. The data were analysed and results were entered as percentage and table.

RESULTS:

The study period was 4 months from 15, April 2016 to 15, August 2016. Within this study period 3024 out patients were seen in the gynaecological clinic, of these 47 patients having uterovaginal prolapse were admitted. Thus giving a prevalence of 1.6%.

Socio demographic profiles:

The mean age of the patient in our study was 49yrs. The age range was between 40 and 50yrs.(Table2)

Nearly 21% of the study population was above 50yrs. 10% presented with prolapse in the age group below 35yrs.

Only 2% of the patients were nulliparous. 94% of women were multiparous (2 or more children).99% belong to low socioeconomic status. The analysis of determinants and risk factors for uterovaginal prolapse are shown in table 4.

60% of women with prolapse were post-menopausal as compared to 77% and 63% in the other 2 studies.59.4% of women had more than 1 risk factor.

Clinical symptomatology and presentation are shown in table 5. The predominant presenting complaint was a history of mass protruding out of vagina 98%.Next common complaint was urinary symptoms32%.Other symptoms were vaginal discharge and ulceration23%. The predominant type of prolapse was uterine prolapse. Cystocele, cystocele &retrocele and enterocele were present in 87%, 44%, 6.3% respectively. 2.1% had procidentia. Staging of prolapse was done by POP Q classification, shown in table 6.

Stage I 4.2%, Stage II 4.2% and Stage III 8.5%, Stage IV 80.8%. Treatment modalities are shown in table 7.

Non-surgical treatment (pessary) was offered as the only modality of treatment for 17% patients as they were not fit for surgical intervention due to comorbid medical problems.

83% were offered surgical treatment. Ward mayo's vaginal hysterectomy with pelvic floor repair was the predominant surgical treatment offered. Fothergill surgery was done in 4% of patients.

Table 1: Distribution of cases

Total cases attending gynaec OPD (15 APR to 15 AUG 2016)	No of prolapse cases	Prevalence
3024	47	1.6%

Table 2: Age distribution

21-30 yrs	31-40 yrs	41-50 yrs	51-60 yrs	61-70 yrs
4%	21%	30%	21%	23%

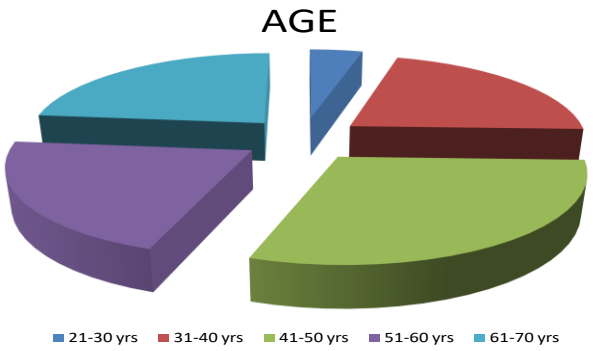


Table 3: parity

Nullipara	P1	P2	P3	>P4
2%	4%	30%	17%	47%

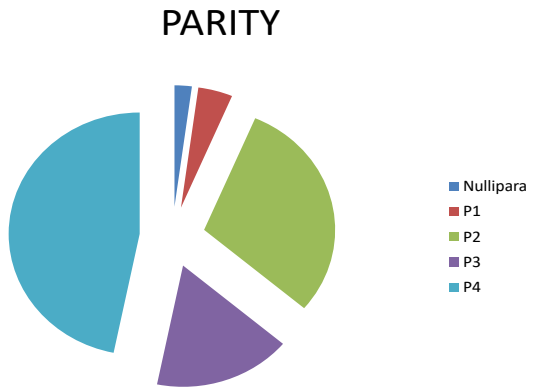


Table 4: Determinants of Utero Vaginal prolapse

Variable	Percentage
Post-menopausal status	60%
Multiparity	94%
Abdominal mass	4.2%

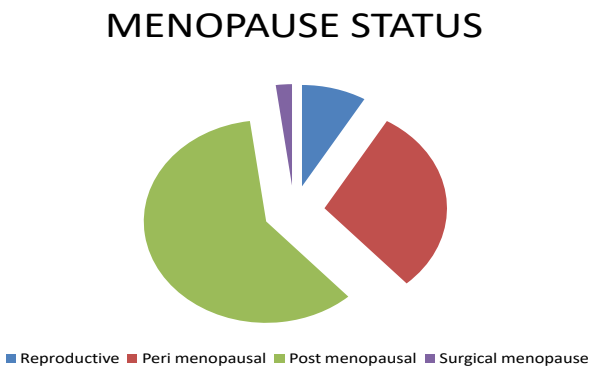


Table 5: Clinical presentation of patients

Variable	Percentage
SYMPTOMS	
Protrusion of mass per vagina	98%
Urinary symptoms	32%
Ulceration	23.4%
TYPES	
Uterine prolapse	91.4%
Cystocele	87%
Cystocele &Rectocele	44%
Enterocele	6.3%

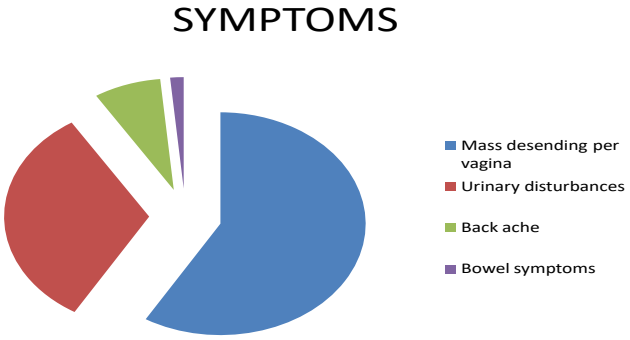


Table 6: Staging POP Q

STAGES - POPQ	
Stage 0	2%
Stage I	4.2%
Stage II	4.2%
Stage III	8.5%
Stage IV	80.8%

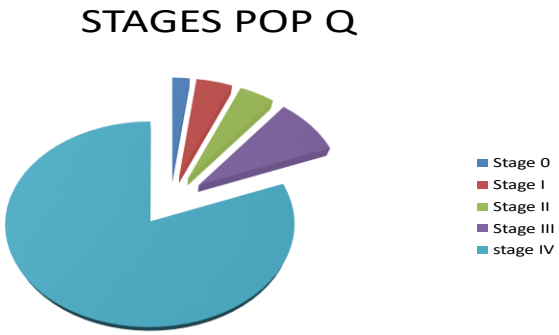
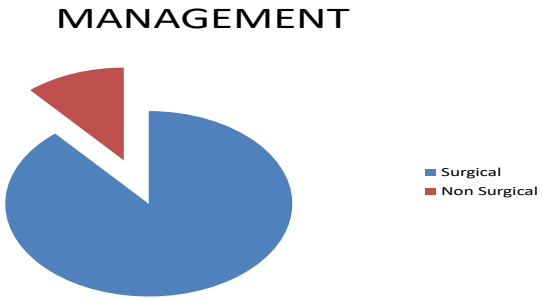
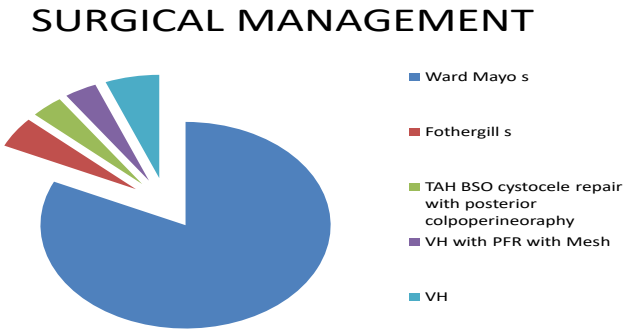


Table 7: Treatment modalities

Variables	Percentage
Surgical	**83%**
Ward Mayo's surgery	68%
Fothergill's surgery	4%
Vaginal hysterectomy	5%
TAH with BSO with cystocele repair with Posterior colpoperineoraphy	3%
VH + mesh repair + Posterior colpoperineoraphy	3%
Non-surgical	**17%**





DISCUSSION:

Uterovaginal prolapse forms 1.6% of the gynaecological cases attending in the outpatient department of our hospital. This is comparable with a study in Indira Gandhi medical college and research institute at Puducherry reported an incidence of 1.8% [1]. Okankuo *et al.;* [2] reported an incidence of 2.1%. In a study in United States and Eleji *et al.;* reported 6.5% incidence of pelvic organ prolapse in a teaching hospital Nigeria. Differences in incidence among other studies may be due to cultural differences, type of population studied, ignorance due to lack of education, attitude of people towards illness, influence of health facilities available. The mean age of our patients was 49 yrs. syndicating the fact that utero vaginal prolapse is more common in the postmenopausal age group. Symptomatic prolapse is less common among African-American women and more common among women with prior vaginal delivery, poor health status, constipation. Nearly one half of symptomatic women are bothered by their symptoms [3]. Our study gives a note on the major determinants or risk factors for uterovaginal prolapse in our population. Being a well-established cause, excessive shredding and tearing during multiple deliveries can be attributed as a predisposing factor for symptomatic pelvic organ prolapse [4].

This is supported by our study with almost 94% having delivered 2 or more children. Tegerstedt *et al.;* also showed that abdominal delivery presents as comparably showing protective factor [4]. Glagener *et al.;* reported that compared with women whose birth were all spontaneous vaginal deliveries, women who had all birth by caesarean section were the least likely to have prolapse [5].

There is significant association between number of vaginal deliveries, duration of labour, vaginal tear and sphincter damage in previous child birth [6]. 68% of women in our study were postmenopausal. This results supported by the Indian study at Indira Gandhi medical college, Puducherry which showed an incidence of 77% [1]. This evidences that the process of aging results in loss of collagen and weakness of fascia and connective tissue which is further accentuated in post-menopausal period due to oestrogen deficiency leading to prolapse. Thus the damage to pelvic floor muscle during childbirth often becomes more evident when age related changes are superimposed.59.4% patients had more than 1 risk factor which highlights the need for health program for the prediction and prevention of prolapse. Bulging is the principal symptom that correlates with prolapse severity [5]. This was supported by our study as the predominant presenting complaint was a history of mass protruding out of vagina in 98% of patients as compared to 82.2% in the Indian study. Vaginal defects supports in older women are associated with obstructive urinary symptoms [7]. The other Indian study shows 69.4% of women presenting with urinary symptoms. Voiding dysfunction was characterized by urinary hesitancy, prolonged or intermittent flow and a need to reduce the prolapse for the sake of voiding. Majority of women had stage IV uterine prolapse. This could be because of the fact that women with prolapse usually do not present to the health care facility early as they are hesitant and worried about social implications.

Various treatment options are available for treatment of uterovaginal prolapse, both surgical and nonsurgical. Non-surgical treatment was offered to 17% patients who received pessary not fit for surgery and those who were advised kegel's exercise had a minimal cystocoele or stage I prolapse. The most common surgery done in our setting was vaginal hysterectomy with pelvic floor repair. These treatment options were to comparable with a previous studies by Sujindra et al[1].Thus the current conventional approach to a uterine prolapse when a women no longer wishes to have children is a vaginal hysterectomy with any additional repair to the vaginal walls depending on the type of defect in the patient. Fothergill's surgery was done for those who wanted to conserve uterus. One case had Ca Cervix Stage IV for which palliative chemotherapy given. Two cases had adnexal mass and hence proceeded with Total Abdominal Hysterectomy with BSO with abdominal cystocele repair with Posterior colpoperineoraphy.

CONCLUSION:

Post-menopausal state with its hypo estrogenic hormonal milieu adding to the already weakened supports due to prolonged labour and vaginal delivery involving the sphincter and vaginal tear are the main determinants of utero vaginal prolapse. The presence of many modifiable risk factors warrants health programs to strongly consider these issues and to develop interventions targeting its prevention.

REFERENCES:

1. Sujindra E, Himabindu N, Sabita P, Bupathy A. Determinants and treatment modalities of uterovaginal prolapse: A retrospective study. Indian Journal of Health Sciences. 2015 Jan 1; 8(1):36.
2. John CT. Genital prolapses. In: Okonofua FE, Odunsi K, editors. Contemporary Obstetrics and

Gynaecology for developing countries. Benin City: WHARC; 2003: 214-26.
3. Rortveit G, Brown JS, Thom DH, Van Den Eeden SK, Creasman JM, Subak LL. Symptomatic pelvic organ prolapse: prevalence and risk factors in a population-based, racially diverse cohort. Obstetrics & Gynecology. 2007 Jun 1; 109(6):1396-403.
4. Tegerstedt G, Miedel A, Mæhle-Schmidt M, Nyrén O, Hammarström M. Obstetric risk factors for symptomatic prolapse: a population-based approach. American journal of obstetrics and gynecology. 2006 Jan 31; 194(1):75-81.
5. Ghetti C, Gregory WT, Edwards SR, Otto LN, Clark AL. Pelvic organ descent and symptoms of pelvic floor disorders. American journal of obstetrics and gynecology. 2005 Jul 31; 193(1):53-7.
6. Thapa S, Angdembe M, Chauhan D, Joshi R. Determinants of pelvic organ prolapse among the women of the western part of Nepal: A case–control study. Journal of Obstetrics and Gynaecology Research. 2014 Feb 1; 40(2):515-20.
7. Bradley CS, Nygaard IE, Women's Health Initiative. Vaginal wall descensus and pelvic floor symptoms in older women. Obstetrics & Gynecology. 2005 Oct 1; 106(4):759-66.