VAGINAL HYSTERECTOMY FOR PROLAPSE: A SNAPSHOT OF PRACTICE IN A PAKISTANI TERTIARY CARE CENTER

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ABSTRACT

Introduction: Vaginal hysterectomy is one of several surgical procedures for the correction of symptomatic prolapse. The vaginal route is less used in Pakistan for such indications, which justifies doing this study for our experience in our local population.

Objective: To determine the frequency of vaginal hysterectomy in women presenting with utero-vaginal prolapse in Ayub Teaching Hospital Abbottabad.

Methods: This Descriptive Cross Sectional Study was conducted at Department of Obstetrics and Gynecology, Ayub Teaching Hospital Abbottabad from 1st October 2021 to 1st April 2022. A total of 102 women presenting with utero-vaginal prolapse were included in the study. All women were followed and managed as per standard departmental protocol and vaginal hysterectomy was noted as per operational definition.

Results: Age range in this study was from 30 to 60 years with mean age of 43.411±5.70 years, mean duration of complaints 5.715±1.66 days and mean parity was 4.297±0.78. Vaginal hysterectomy was done in 23.5% of patients.

Conclusion: In conclusion, vaginal hysterectomy is one of the major most practiced operation for women with uterovaginal prolapse.

Keywords: Utero-vaginal prolapse, Vaginal hysterectomy, Prolapse

INTRODUCTION

Pelvic organs prolapse (POP) consists of the fall of the anterior, posterior vaginal wall or apex of the vagina (uterus or vaginal dome after hysterectomy) towards the vaginal introitus, with the sensation of vaginal pressure being the most reported symptom by women, which can affect physical and mental well-being and quality of life. [1,2]

Pelvic prolapse is very common among multiparous women over 50, affecting approximately 50% of women over age 50.3 Pelvic floor prolapse is most often clinically diagnosed through physical exams and medical history.

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Imaging plays a limited role in evaluating mild cases of pelvic prolapse that involve a single pelvic compartment and organ. Nonetheless, trans labial ultrasound and dynamic pelvic MRI (MR defecography) serve as valuable tools in diagnosing pelvic prolapse in complex cases involving multiple compartments and multiple pelvic organs.[3]

Vaginal hysterectomy is one of several surgical procedures for the correction of symptomatic prolapse.[4] Reported benefits of vaginal hysterectomy compared to abdominal hysterectomy include shorter duration of hospital stay (WMD 1.0 day, 95% CI: 0.7 to 1.2 days), speedier return to normal activities (WMD 9.5 days, 95% CI: 6.4 to 12.6 days), and fewer unspecified infections or febrile episodes (OR 0.42, 95% CI: 0.21 to 0.83).[5]

In a study by Pakbaz M, et al has shown that frequency of vaginal hysterectomy was 92.3% in patients with utero-vaginal prolapse.[6] In another study by Chhabra S, et al has shown that frequency of vaginal hysterectomy was 21.6% in patients with utero-vaginal prolapse.[7]

To the best of our knowledge no published study has investigated the frequency of vaginal hysterectomy in patients with utero-vaginal prolapse. The vaginal route is less used in

Pakistan for such indications, which justifies doing this study for our experience in our local population.

MATERIA AND METHODS

This study was conducted at the department of obstetrics & gynecology, Ayub teaching hospital Abbottabad. The cross-sectional study span over a period of six months from October 2021 to April 2022. A sample size of 102 was calculated using WHO software with 95 % confidence interval and 8 % margin of error keeping frequency of vaginal hysterectomy 21.6 % in patients with uterovaginal prolapse.[7] Patients were enrolled in study using nonprobability consecutive sampling technique. Al women aged 30 to 60 years presenting with uterovaginal prolapse of any parity were included in the study. All pregnant women were excluded.

After getting permission from the ethical committee of Ayub Teaching Hospital Abbottabad, patients fulfilling the inclusion criteria from the outdoor department of obstetrics and gynaecology, Ayub Teaching Hospital Abbottabad were included in the study. Informed consent was taken from each patient, ensuring confidentiality and explaining the risk and benefit involved to the patient while taking part in this study. Base line demographic information of patients (age, marital status, parity, duration of complaints) was taken. All women were followed and managed as per standard departmental protocol and vaginal hysterectomy was noted as per operational definition by researcher herself and noted on specially designed proforma.

Data was analyzed with statistical analysis program (IBM-SPSS V:25). Frequencies and percentages were calculated for qualitative variables like marital status, stages of uterovaginal prolapse and vaginal hysterectomy. Mean ± SD was presented for quantitative variables like age, duration of complaints and parity. Vaginal hysterectomy was stratified to age, marital status, parity, stages of uterovaginal prolapse and duration of complaints. Post stratification chi-square was applied, $p \leq 0.05$ was considered statistically significant.

RESULTS

Age of the patients ranges from 30 to 60 years with mean age of 43.411±5.70 years, mean duration of complaints 5.715±1.66 days and mean parity was 4.297±0.78 as shown in Table-I.

Frequency and % age of patients according to stages of uterovaginal prolapse are shown in Table- II.

Vaginal hysterectomy was done in 23.5% of patients as shown in Table-III.

Stratification of vaginal hysterectomy with respect to age, marital status, parity, stages of uterovaginal prolapse and duration of complaints are shown in Tables-IV, V, VI, VII and VIII respectively.

Table- I: Mean±SD of patients according to age, duration of complaints and Parity

n=102

Demographics		**Mean±SD**
1	Age (years)	43.411±5.70
2	Duration of complaints (days)	5.715±1.66
3	Parity	4.297±0.78

Table- II: Frequency and %age of patients according to stages of uterovaginal prolapse

n=102

Stages of uterovaginal prolapse	Frequency	%age
II	52	5 1%
III	34	33.3%
IV	16	15.7%
Total	102	100%

Table- III: Frequency and %age of patients according to Vaginal Hysterectomy

n=102

Vaginal Hysterectomy	Frequency	%age
Yes	24	23.5%
No	78	76.5%
Total	102	100%

Table-IV: Stratification of vaginal hysterectomy with respect to age.

Age (years)	Vaginal Hysterectomy		p-value
	Yes	No	
30-45	**13(22.4%)**	**45(77.6%)**	**0.760**
46-60	**11(25%)**	**33(75%)**	
Total	**24(23.5%)**	**78(76.5%)**	

Table-V: Stratification of vaginal hysterectomy with respect to marital status.

Marital status	Vaginal Hysterectomy		p-value
	Yes	No	
Married	**23(24.5%)**	**71(75.5%)**	**0.444**
Unmarried	**1(12.5%)**	**7(87.5%)**	
Total	**24(23.5%)**	**78(76.5%)**	

Table-VI: Stratification of vaginal hysterectomy with respect to parity.

Parity	Vaginal Hysterectomy	p-value

	Yes	No	
0-3	4(26.7%)	11(73.3%)	0.829
>3	19(24.1%)	60(75.9%)	
Total	23(24.5%)	71(75.5%)	

Table-VII: Stratification of vaginal hysterectomy with respect to stages of uterovaginal prolapse.

Stages of uterovaginal prolapse	Vaginal Hysterectomy		p-value
	Yes	No	
II	0(0%)	52(100%)	0.000
III	11(32.4%)	23(67.6%)	
IV	13(81.2%)	3(18.8%)	
Total	24(23.5%)	78(76.5%)	

Table-VIII: Stratification of vaginal hysterectomy with respect to duration of complaints.

Duration of complaints (days)	Vaginal Hysterectomy		p-value
	Yes	No	
1-7	19(22.9%)	64(77.1%)	0.751
>7	5(26.3%)	14(73.7%)	
Total	24(23.5%)	78(76.5%)	

DISCUSSION

Uterovaginal prolapse is a common gynecological disorder, predominantly seen in middle and old age. Genitals prolapse was found to be a common indication for surgery with no change in trends over the years. Chhabra et al [7] reported that even if the etiology of pelvic prolapse is poorly defined and multifactorial, risk factors associated with aging, such as biomechanical abnormalities in connective tissue composition, hormonal deficiency, and irregular tissue metabolism are nonmodifiable and, therefore, often seen in clinical practice. According to a study by Olsen et al,[8] pelvic floor dysfunction is a major health issue for older women, indicated by the 11.1% lifetime risk of undergoing a single operation for pelvic organ prolapse and urinary incontinence, as well as by the large proportion of repeat operations. The initial damage to pelvic floor integrity generally occurs during childbirth and later with the climacteric, a second insult occurs. So, if there are many births, there is more damage, and the climacteric effect adds to it, which often leads to prolapse of the vagina, cervix, and uterus. As is evident from the study by Romanzi et al [9] lower urinary tract symptoms are common in women with genital prolapse. Voiding difficulty, bladder outlet obstruction, and occult stress incontinence may coexist, and they are associated with prolapse. In a study by Mehboob et al,[10] of the 98 women who had vaginal hysterectomy with vaginal wall repair for genital prolapse, the majority had developed prolapse between 41 and 60 years of age. Jones et al [11] also reported that weakening of the pelvic floor muscles and a decrease in pelvic connective tissue resilience due to menopause facilitate progression to symptomatic pelvic visceral prolapse.

In the present study, although 80% women were more than 40 years of age at diagnosis, many had had the disorder for years. Rural

women complete childbearing at a young age, and the disorder starts at a young age and is aggravated near menopause, but the women continue to live with it. In the present analysis, no trends were found. In the study by Mehboob et al,[10] there were no woman who had not given birth, 25.5% had had 3 to 5 births, and 75% had had 5 or more births, a major factor responsible for prolapse.

In the study by Ugboma et al,[12] genital prolapse (118 cases) accounted for 11.8% of gynecological admissions (a very high proportion of genital prolapse), 70% study subjects were above 45 years of age, and 73% had had 5 or more births. Authors also report that the most common symptom was “something coming down the vagina” (95% of study subjects). In the present study, Vaginal hysterectomy was done in 23.5% patients. In a study by Pakbaz M, et al has shown that frequency of vaginal hysterectomy was 92.3% in patients with utero-vaginal prolapse.[6] In another study by Chhabra S, et al has shown that frequency of vaginal hysterectomy was 21.6% in patients with utero-vaginal prolapse.[7]

In a study of surgical management of 200 cases of genital prolapse, Dutta et al [13] reported that 40% of their cases had third degree uterine prolapse, 42% had second-degree uterine prolapse, and 18% had first- degree uterine prolapse. In the present study, 88.1% had third-degree uterine prolapse with varying degrees of vaginal prolapse, and only 2.6% had surgery for first-degree cervico uterine prolapse with varying degrees of anterior/posterior vaginal wall prolapse. In this area, rural women usually wait until their day-to-day life is affected. Furthermore, practice decisions regarding surgery are taken more often in cases of third-degree uterocervical prolapse, and the present analysis is only of cases where surgery was performed. Women with first- degree cervical descent are counseled and periodically reviewed. Also, sometimes the cervix might have only first-degree descent, but vaginal wall prolapse is more than cervical descent and may be responsible for symptomatology, and, in such cases, vaginal hysterectomy is the preferred mode of therapy. Pakbaz et al,[14] also reported that vaginal hysterectomy is an efficient treatment for uterovaginal prolapse with swift recovery and a low rate of complication. Many women have urinary stress incontinence; therefore, efforts to disclose latent stress incontinence should be undertaken preoperatively. Overall, complications occurred in 14.7% of women: 15% in block A, 21.0% in block B, 10.6% in block C, and 4% in block D, a highly significant decrease in complications over the years, especially in block D (the rates of complications in all blocks are compared with rate of complication in block D) ($P < 0.001$). This is probably because of preoperative evaluation and therapy of lower genital tract infection and possibly better antibiotics and overall better care. Single center study was the main limiting factor.

CONCLUSION

In conclusion, vaginal hysterectomy is one of the major most practiced operation for women with uterovaginal prolapse. The common presenting complaints of the patients was mass per vagina. The most performed surgery was vaginal hysterectomy and anterior colporrhaphy with or without posterior colpoperineorrhaphy. Surgical morbidity can be reduced by proper preoperative, intraoperative and postoperative care. Preoperative meticulous evaluation and care are imperative. Treatment of urinary and genital infection and evaluation of biochemical and hematological parameters to prevent intraoperative and postoperative morbidity are essential. With an aging population, pelvic floor disorders are likely to increase over the years. However, attempts need to be made to have safe birth and healthy lifestyles to prevent genital prolapse and, in case it occurs, to provide advocacy and therapy that prevents progression so that hysterectomy is averted, and if hysterectomy is needed, the aim should be to have the least morbidity.

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