



ASSESSMENT OF SOCIO-DEMOGRAPHIC AND OBSTETRIC RISK FACTORS IN WOMEN WITH GENITOURINARY PROLAPSED: A RETROSPECTIVE STUDY AT TERTIARY REFERRAL CENTRE.

Gynaecology

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ABSTRACT

Background: - Uterovaginal prolapse is an abnormal protrusion or herniation of pelvic organs from its normal anatomical position in the pelvis, due to failure of anatomical supports.^{1,2} It is a common health problem affecting up to 40% of multipara women over 35 years old. Obstetric trauma has long been thought to be the most important factor in the pathogenesis of genitourinary prolapse.³ Very little is known about urogenital complaints in postmenopausal women in India as Indian women are reluctant to come forward with these complaints because of lack of information, fear and embarrassment, and instead chose to endure them considering it a part of the aging process.^{4,5} This study was conducted to know the associated socio-epidemiological factors and various treatment modalities used and immediate complications in the management of women with pelvic organ prolapse in central India.

Aim: To study socio-demographic and obstetric risk factors in women with genitourinary prolapsed referred to a tertiary care centre in central India.

Methods: This retrospective study was done after getting ethical clearance from institutional ethical committee by reviewing of medical records of all women who admitted with genitourinary prolapse between January 2015 to December 2016. Complete history, demographic and clinical data, including past history; presenting symptoms, physical examination findings, management modalities used and their outcome were retrieved from records and entered in preformed proforma. The data was statistical analyzed and conclusions were drawn.

Results: In our study majority (48.91%) of women were more than 50 years of age, belonging to lower socioeconomic status (82.60%) with mostly were illiterate (56.52%) and married ≤ 18 year of age. Majority of female were multipara (81.52%) had home deliveries (63.04%) with first delivery in ≤ 18 year of age (63.04%). Most of these female were postmenopausal (68.47%) presented with the history of something coming out per vaginum (100%) who were underwent vaginal hysterectomy with anterior colporrhaphy with posterior colpoperineorrhaphy.

Conclusion: Pelvic organ prolapse is one of the major cause of morbidity in these women and affecting the quality of life and leading to major surgery. The present study demonstrates a correlation between illiteracy, lower socioeconomic class, agricultural activities, early age of marriage, multi parity (> 3), home delivery and less inter pregnancy interval as a key factors for Genitourinary prolapse.

KEYWORDS

Uterovaginal prolapse, Urogenitalprolapse, Pelvic organ prolapse, Risk Factors

INTRODUCTION:

Uterovaginal prolapse is an abnormal protrusion or herniation of pelvic organs from its normal anatomical position in the pelvis, due to failure of anatomical supports.^{1,2} It is a common health problem affecting up to 40% of multipara women over 35 years old.³ The exact prevalence of pelvic organ prolapse is difficult to determine however, the life time risk of requiring at least one operation to correct incontinence or prolapse has been estimated at approximately 11%.^{4,5} Statistics released by the Union ministry of health and family welfare showed that life expectancy in India has gone up by five years, from 63.9 years for females in 2001-2005 to 69.6 years in 2011-2015. Thus, women can be expected to live one third of their lives in the post- menopausal state. It is therefore expected that management of the gynaecological problems of menopause will become an increasingly important aspect of routine gynaecological practice.⁶ The development of uterovaginal prolapse is multifactorial. Obstetric trauma has long been thought to be the most important factor in the pathogenesis of genitourinary prolapse.¹ Pelvic organ prolapse (POP) is a most common gynecological health problem contributing to maternal morbidity and mortality among women of reproductive age in developing countries.⁷ It has significant negative effects on a woman's quality of life, ranging from physical discomfort, psychological and sexual complaints to occupational and social restrictions.³ It is a preventable and curable disease, but most of women are unaware about it and have low access to diagnosis and treatment facilities. Very little is known about urogenital complaints in postmenopausal women in India as Indian women are reluctant to come forward with these complaints because of lack of information, fear and embarrassment, and instead chose to endure them considering it a part of the aging process.⁴ This study was conducted to know the associated risk factors, co-morbidities and various modes of treatment modalities used in the management of women with pelvic organ prolapse.

Aim:

To study socio-demographic and obstetric risk factors in women with

genitourinary prolapsed referred to a tertiary care centre in central India.

Objectives:

1. To explore socio-demographic and obstetric risk factors associated with Prolapse.
2. To study on clinical presentation and associated co morbidities with prolapsed.
3. To analyzed the different modes of treatment and immediate complications during management of genitourinary prolapse.

Material & Methods:

This retrospective study was done after getting ethical clearance from institutional ethical committee by reviewing of medical records of all women who admitted with genitourinary prolapse (diagnosed by Baden-Walker classification)⁸ operated at departments of obstetrics & Gynecology at Chirayu medical college & hospital Bhopal from January 2015 to December 2016. Complete history, demographic and clinical data, including past obstetrical, medical, surgical and family history; presenting symptoms and signs; physical examination findings, management modalities used and their outcome were retrieved from records and entered in preformed proforma and analysis was done with Epi-Info software. Simple statistical measures like percentage and proportions were used in the study.

RESULTS:

In our study majority (65.21%) of women were more than 50 years of age, belonging to lower socioeconomic status (82.60%) with mostly were illiterate (56.52%) and married ≤ 18 year of age (82.60%). Majority of female were multipara (81.52%) had home deliveries (63.04%) with first delivery at less than 18 years of age (63.04%). Most of the female were postmenopausal (68.47%) presented with history of something coming out per vaginum (100%) who were underwent vaginal hysterectomy with anterior colporrhaphy with posterior colpoperineorrhaphy. In post-operative period 13.04% women needed blood transfusion.

Table1: Distribution Of Cases According To Socio-demographic Profile.

S.N.	Variables		Total cases (n= 92)	Percentage (%)
1.	Age at the time of presentation (in years)	≤30	01	01.086%
		31-40	04	04.34%
		41-50	27	29.34%
		51-60	45	48.91%
		61-70	13	14.13%
	>70	02	02.17%	
2.	Socioeconomic status	Lower	76	82.60%
		Middle	15	16.30%
		Upper	01	01.086%
3.	Age at marriage	≤18	76	82.60%
		19-30	14	15.21%
		>30	02	02.17%
4.	Educational status	Illiterate	52	56.52%
		Primary education	38	41.30%
		Graduate	02	02.17%
5.	Occupation	Housewife	31	33.69%
		Laborer	16	17.39%
		Agricultures	45	48.91%

Table: 2 Distribution Of Cases According To Obstetric Variables And Menstrual Status

S.N.	Variables		Total cases (n= 92)	Percentage (%)	
1.	Gravidity Score	Nulligravida	01	01.08%	
		Single Birth	06	06.52%	
		Multipara	75	81.52%	
2.	Type of delivery	Vaginal	Home Delivery	58	63.04%
			Hospital delivery	24	26.08%
		Operative vaginal delivery		08	08.69%
		Caesarean section		02	02.17%
3.	Birth spacing (in years)	<2	76	82.60%	
		2-5	04	04.34%	
		>5	02	02.17%	
4.	Age at 1st child birth	≤18	52	63.04%	
		19-25	35	38.04%	
		26-30	03	03.26%	
		>30	02	02.17%	
5.	Menstrual status	Premenopausal	29	31.52%	
		Postmenopausal	63	68.47%	

Table3. Distribution Of Cases According To Clinical Presentation And Associated Co-morbidity

S.N.	Variables		Total cases (n= 92)	Percentage (%)	
1.	Clinical presentation	Something coming out Per Vaginal	92	100%	
		Vaginal Discharge	14	15.21%	
		Urinary Symptoms	11	11.95%	
		Ulcer	21	22.82%	
		Constipation	09	09.78%	
		Backache	22	23.91%	
		Lower Abdominal Pain	11	11.95%	
2.	Mean duration of symptoms (in years)		7.42		
3.	Co-Morbidity	Chronic cough	09	09.78%	
		Constipation	12	13.04%	
		Diabetes	11	11.95%	
		Previous Gynecological surgeries	07	07.60%	
		BMI	<18.5	18	19.56%
			18.5-24.9	51	55.43%
			>25	23	25%

Table 4: Distribution Of Cases According To Various Treatment Modalities Received With Immediate Post-operative Complications.

S.N.	Variables		Total cases (n=92)	Percent age (%)
1.	Treatment modality received	Vaginal Hysterectomy with anterior colporrhaphy posterior colpoperineorrhaphy	82	89.13%
		Fothergill's operation	06	06.52%
		Vault repair	04	04.34%
2.	Immediate Post-Operative Complications	Blood Transfusion	26	28.26%
		Secondary Hemorrhage	06	06.52%
		Sepsis/Fever	05	05.43%
		ICU Admission	04	04.34%

DISCUSSION:-

In the present study majority of women admitted with genitourinary prolapse were above 50 years of age (65.21%). Similarly study by Eleje et al showed that majority, 39.4% (79/199) of the patients were within the age of 65-74 years.⁴ In the study by Kavita et al median age of patients was 56.19 years.⁶ Majority (82.60%) of the female in our study belonged to lower socioeconomic status with married at younger age group (≤18 years). Similarly, study by Verma D et al mentioned that, early marriage (before or at 20 years of age) was one of the contributing factor for pelvic organ prolapsed and this thought was supported by Bijalwan RP et al and Prasad DP.^{3,11,12}

In our study most of the women were illiterate (56.52%), and were agricultural (48.91%) by profession correlating with the literature as study by Eleje et al showed that there was no formal education in 29.2% women and around 26.2% patients had a previous history of prolonged labor.⁴ These results build on existing evidence that education seems to confer a protective effect on the development of pelvic organ prolapse. The most probable explanation for this relationship is small family, antenatal care, supervised hospital deliveries, better nourished, less involve in physically exerting activities, seek early medically help.

In the present study genitourinary prolapse were common in multipara cases (81.52%) and most of them had history home delivery (63.04%) with inter pregnancy interval of less than two years (82.60%). Majority (63.04%) of female had first delivery at less than 18 years of age. Similar to our study Chiaffarino et al had opinion that compared with nullipara, parous women tended to have a higher risk of genital prolapse.¹⁰ In the study by Verma et al 72% women with pelvic organ prolapse had two or more unsupervised deliveries at home. Similar results were found in another community-based study, in which the 66% patients of the uterovaginal prolapse had two or more deliveries at home.³ Singh DR et al observed that adolescent pregnancy, lack of rest during and immediately after pregnancy - including carrying heavy loads, improper birthing practices used by unskilled birth attendants, poor nutrition, frequent pregnancies and pregnancies close together due to lack of access to contraception are the major risk factors associated with Urogenital prolapsed.⁷

In the present study genitourinary prolapse were observed only 2.17% women with previous caesarean delivery. Study by Chiaffarino et al showed that no risk of prolapse in women who delivered by caesarean section, suggesting that it is the vaginal delivery and not pregnancy itself that increases the risk of prolapse.¹⁰ They also described that Childbirth in particular, has been considered the cause of damage to pelvic connective tissues and nerves (partial pudendal and perineal neuropathies), leading to subsequent urogenital prolapse and/or incontinence.¹⁰

In our study genitourinary prolapsed were more (68.47%) in postmenopausal women compare to premenopausal women, supported by the literature.^{3,6,7} The trigger is a loss of estrogen during menopause. This hormone helps to keep the pelvic floor muscles, which support the vagina and bladder, well toned. Once estrogen levels drop after menopause, these muscles become thinner, weaker and less elastic.

In the present study all women came to the hospital with complaint of something coming-out per vaginum, with trophic ulcer were seen in 22.82% cases. Other associated complaints were urinary symptoms (11.95%), vaginal discharge (15.21%), constipation (9.78%),

Backache (23.91%) and lower abdominal pain (11.95%). Mean duration of symptoms in our study was 7.2 years. In the study by Verma D et al 52% patients were suffering from the prolapse from more than 5 years and 10% patients were suffering from prolapsed from more than 10 years,³ same as Bijalwal RP et al.¹¹ All studied were agreed that ignorance in terms of recognizing the problem and seeking medical attention, illiteracy and poor family socio-economic status are the main contributory factors for development of prolapse.

In the current study associated co-morbidities were chronic cough, constipation, Diabetes and previous gynaecological surgeries were the associated co-morbidity observed. Mostly (55.43%) women were of normal BMI.

In our centre mostly (89.13%) women had underwent vaginal hysterectomy with anterior colporrhaphy posterior colpoperineorrhaphy. Fothergills were choosen as a surgery in 6.52% women who were young and want to preserve uterus. Four women were admitted with vault prolapse underwent sacrospinous fixation. Similarly, in study by Sujinder et al and Elejeet et al most common surgery done was vaginal hysterectomy and pelvic floor repair.^{1,4} In our study because of illiteracy, ignorance, late age, social restriction leads to presentation mostly in third degree with associated anterior and posterior prolapse. As most of the women were either completed their family or postmenopausal vaginal hysterectomy with anterior and posterior defect repair was commonly performed surgery at our institute.

In all operated cases 13.04% needed postoperative blood transfusion. 4.34% women had ICU stay in view of postoperative fever/sepsis.

CONCLUSION:-

In the modern era, the biggest achievement of last century was increase in life expectancy that has resulted in an increasing aged population worldwide. Now, women spend a significant part of their lives in postmenopausal states. Several factors, including a lower level of estrogen in postmenopausal women leads to increased risk for a number of health problems. Pelvic organ prolapse is one of the major cause of morbidity in these women and affecting the quality of life and leading to major surgery.

The present study demonstrates a correlation between illiteracy, lower socioeconomic class, agricultural activities, early age of marriage, multi parity (> 3), home delivery and less inter pregnancy interval as a key factors for Genitourinary prolapse. So on the basis of above findings this study will again emphasis the role of promotion of institutional delivery, adequate postpartum rest with nutritious diet, pelvic floor exercises and counseling of family planning in immediate postpartum period to reduce future impact of child birth.

Hence, social activities and awareness programmes towards adolescent nutrition, reproductive health, family planning services and development of well women clinics can definitely will reduce the development of this aging phenomenon.

Limitation:

Since this study was conducted on patient admitted for prolapsed surgery at a tertiary referral centre therefore, the result couldn't be generalized to whole population. Further studies on community level will definitely throw more light on this "natural " phenomenon. This will also help in formulating certain guidelines with regards to the diagnosis and management of this natural phase of life.

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