

A study to find the prevalence of prolapse uterus and the various treatment modalities applied in tertiary care hospital

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Abstract

Introduction: Uterine prolapse is the condition of the uterus collapsing, falling down, or downward displacement of the uterus with relation to the vagina. It is also defined as the bulging of the uterus into the vagina. **Aims and Objectives:** To find the prevalence of prolapse uterus cases and also to find out the various treatment modalities applied for prolapse uterus. **Material and Method:** Retrospective hospital record based study carried among the 1715 female patients admitted from various causes in the department of Obstetrics and Gynaecology from January 2012 to December 2014 in a Tertiary care Hospital were included. Data was collected from the Gynaecology Inpatient's records, in which the presenting symptoms, clinical diagnosis and investigations were recorded. Information on various symptoms, ages, clinical findings, diagnosis and the various treatment modalities applied among 1715 women were recorded. **Results:** The findings of the present study shows that the majority of the patients were between the age group of 40-44 years (15.80%) followed by 35-39 years (15.69%) and the least belonged to the age group of less than 20 years (1.11%). The cases of uterine prolapse are more common in the age group of 41-50 years (25.74%) followed by more than 60 years (21.53%). Majority of the uterine prolapse cases were treated by Vaginal Hysterectomy (70.05%). **Conclusion:** Effective antenatal care, supervised hospital deliveries, limiting of family size and efficient use of contraception and mandatory Kegel's exercises after childbirth should be applied in reducing this disease so that our women can have better quality of life.


Keywords: Prolapse Uterus, Vaginal Hysterectomy, Age.

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Received Date: 15/07/2015 Revised Date: 22/08/2015 Accepted Date: 08/09/2015

Access this article online	
Quick Response Code:	Website: www.medpulse.in
	DOI: 10 September 2015

INTRODUCTION

Uterine prolapse is the condition of the uterus collapsing, falling down, or downward displacement of the uterus with relation to the vagina.¹ It is also defined as the bulging of the uterus into the vagina^{2, 3}. Uterine prolapse occurs when pelvic floor muscles and ligaments stretch and weaken, providing inadequate support for the uterus. The uterus then slips down into or protrudes out of the

vagina.⁴ A woman with prolapse may complain of a lump in the vagina or a feeling of "something is coming down", back-ache and a bearing down sensation, abdominal pain, vaginal discharge, disturbances of micturition, frequency and dysuria, stress incontinence, difficulty in defecation, profuse periods, irregular bleeding and bleeding due to the protruding prolapse becoming ulcerated. If there is a large prolapse, the external swelling may inconvenience the woman in walking and carrying out her every day duties⁵. The true incidence of this disorder is not known because many of the cases are asymptomatic and many women feel shy to complain of uterovaginal prolapse⁶. Most women who develop prolapse are of menopausal age when the pelvic support become slack and atonic⁷. If a weakness is present, the circumstances likely to precipitate the onset of prolapse are-increased intra-abdominal pressure (as in chronic cough, chronic constipation, ascites, lifting heavy weights, straining at stool, tumour), increased weight of uterus (resulting from subinvolution, myohyperplasia) and traction on uterus by

vaginal prolapse or by a large cervical polyp⁸. The prevalence of pelvic organ prolapse was 50% for women who have give birth, though most women were asymptomatic⁹. Another article cited that 50% of the female population in the United States are affected by pelvic order prolapse with a prevalence rate that can vary from 30% to 93%, varying among different populations¹⁰. A questionnaire based study stated that 46.8% of the responses were positive for symptoms of pelvic organ prolapse and of the response group, 46.9% were vaginally examined with 21% having clinically relevant pelvic organ prolapse¹¹. Parity and obesity were strongly associated with increased risk for uterine prolapsed¹².

AIMS AND OBJECTIVES

1. To find the prevalence of prolapse uterus cases.
2. To find out the various treatment modalities applied for prolapse uterus.

MATERIAL AND METHOD

Study Design

The present study was a Retrospective hospital record based study carried among the female patients admitted from various causes in the department of Obstetrics and Gynaecology in a Tertiary care Hospital.

Study Participants

1715 patients who were admitted in the Obstetrics and Gynaecology Department from January 2012 to December 2014 were included in the study

Inclusion Criteria

Patients admitted during January 2012 and December 2014 and women reporting only with Gynaecological problems.

Exclusion Criteria

Women reporting with non Gynaecological problems were excluded. As abortions are part of obstetric morbidity they were also not included.

Setting

This study had approval from the Research and Ethics Committee to conduct this study at the department of Obstetrics and Gynaecology. The study took three months to complete. (Jan 2015 to March 2015)

Data Collection

Data was collected from the Gynaecology Inpatient's records, in which the presenting symptoms, clinical diagnosis and investigations were recorded. Information on various symptoms, ages, clinical findings, diagnosis and the various treatment modalities applied among 1715 women were recorded. Gynaecological morbidity was classified into reproductive tract infections, Prolapse uterus, menstrual irregularities, Fibroids, gynaecological

cancers, menopausal symptoms and others. Frequency of each morbidity was calculated separately.

Statistical analysis

Statistical tests used were percentages and proportions. All data analysis had been done by using SPSS software for windows.

RESULTS

Table 1: Age-wise distribution of the Study subjects

Sr. No	Age	Number	Percentage
1	less than 20	19	1.11
2	20-24	134	7.81
3	25-29	207	12.07
4	30-34	241	14.05
5	35-39	269	15.69
6	40-44	271	15.80
7	45-49	194	11.31
8	50-54	130	7.58
9	55-59	76	4.43
10	>60	174	10.15
	Total	1715	100.00

Age – wise distribution of the patients admitted in the OBG department shows that the majority of the patients were between the age group of 40-44 years(15.80%) followed by 35-39 years(15.69%),30-34 years(14.05%), 25-29 years (12.07%) and the least belonged to the age group of less than 20 years (1.11%).

Table 2: Year- wise distribution of the study subjects

Sr. No	Year	Number	Percentage
1	2012	443	25.83
2	2013	705	41.11
3	2014	567	33.06
	Total	1715	100.00

Year– wise distribution of the patients admitted in the OBG department shows that the majority of the patients were admitted in the year 2013 (41.11%) followed by 2014 (33.06%) and the least in the year 2012 (25.83%).

Table 3: Association with the age of the patient with Uterine prolapse

Sr. No	Age	Uterine Prolapse	
		Number	Percentage
1	less than 20	4	0.99
2	21-30	44	10.89
3	31-40	81	20.05
4	41-50	104	25.74
5	51-60	84	20.79
6	>60	87	21.53
	Total	404	100

The cases of uterine prolapse are more common in the age group of 41-50 years (25.74%) followed by more than 60 years (21.53%) , 51-60 years (20.79%) , 31-40

years (20.05%) and the least were in the age group of less than 20 (1%).

Table 4: Distribution of the uterine prolapse cases based on various treatments given

Sr. No	Treatment given	Uterine Prolapse	
		Number	Percentage
1	Vaginal Hysterectomy	283	70.05
2	Total Abdominal Hysterectomy	113	27.97
3	Repair of Uterus	6	1.49
4	Tubal Ligation	2	0.50
	Total	404	100.00

Majority of the uterine prolapse cases were treated by Vaginal Hysterectomy (70.05%) followed by Total Abdominal Hysterectomy (27.97%) whereas only 1.49% and 0.50% were treated by repair of the uterus and Tubal ligation respectively.

DISCUSSION

The findings of the present study shows that the majority of the patients were between the age group of 40-44 years (15.80%) followed by 35-39 years(15.69%),30-34 years(14.05%), 25-29 years (12.07%) and the least belonged to the age group of less than 20 years (1.11%). Majority of the patients were admitted in the year 2013(41.11%) followed by 2014 (33.06%) and the least in the year 2012 (25.83%). The cases of uterine prolapse are more common in the age group of 41-50 years(25.74%) followed by more than 60 years (21.53%), 51-60 years (20.79%), 31-40 years(20.05%) and the least were in the age group of less than 20 years (1%). Majority of the uterine prolapse cases were treated by Vaginal Hysterectomy (70.05%) followed by Total Abdominal Hysterectomy (27.97%) whereas only 1.49% and 0.50% were treated by repair of the uterus and Tubal ligation respectively. Similarly a study done by Darshan et al¹³ reveals the age group of the respondents with Uterine Prolapse. 6.06% of them range from 23-30 years of age, where as 12.12% were in the age group of 31-40 years. The respondents within the ages of 41-50 years were 34.85%, while 21.21% were from the age group of 51-60 years. Another 19.7% of the respondents were from the age group of 61-70 years and the remaining 6.06% were between 71-80 years of age. A study done by Fatima Sajan et al¹⁴ showed that there was a marked difference in the prevalence of women reporting at least one and at least two gynaecological morbidities: menstrual disorders and uterine prolapse being the most frequently reported morbidities. This decline in the magnitude of ill-health, though significant, is still unacceptably high as uterine prolapse largely contributes to the 20% of women who complain of at least two gynecological morbidities. The

chronic sequelae of uterine prolapse are urinary incontinence and require surgical intervention. Thus, if nearly 20% of these women are now complaining of symptoms of uterine prolapse, the medical costs of surgical repair needs to be considered in any health planning for these communities. Similar observations were noted by a study done by Pooja Patil and Abhijeet Patil where in majority of the Uterine prolapse patients (74.47%) were treated with vaginal hysterectomy¹⁵. Where as a study done by Shergil et al¹⁶ showed that maximum number of women who underwent hysterectomy were in the age group of 31-50 years. Abdominal hysterectomy was the procedure of choice in conditions other than uterovaginal prolapse.

CONCLUSION

Prolapse Uterus affects women both in the child bearing age and post menopausal period. To some extent it is a man-made disease. As pregnancy and childbirth are such physiological phenomenon which cannot be prevented but we can prevent the repeated pregnancies at short intervals and deliveries by untrained dais at home. Thus multiparity, prolonged labour, deliveries by untrained dais, less spacing between children, menopause are significant determinants. Efforts should be taken towards public enlightenment and health education so that early marriages and early childbearing could be avoided and women should have the 'right' and courage to face this disease and receive treatment at earlier stage. Effective antenatal care, supervised hospital deliveries, limiting of family size and efficient use of contraception and mandatory Kegel's exercises after childbirth should be applied in reducing this disease so that our women can have better quality of life. In choosing a hysterectomy technique in women with benign gynaecological conditions without prolapse, there is no doubt that the vaginal route is safest, least invasive, economical, cosmetic, and natural route.

REFERENCES

1. Goodman CC, Snyder TEK. Differential Diagnosis for Physical Therapists. 4th ed. St. Louis: Saunders Elsevier, 2007.
2. Goodman CC, Fuller KS. Pathology: Implications for the Physical Therapist. 3rd ed. St. Louis: Saunders Elsevier, 2009 Women's Surgery Center. Pelvic Organ Prolapse. http://www.gyndr.com/genital_prolapse_surgery.php (accessed 5 April 2010).
3. Schorge JO, Schaffer JI, Halvorson LM, Hoffman BL, Bradshaw KD, Cunningham FG, Pelvic Organ Prolapse Williams Gynecology 2008:532-533
4. Padubiri VG and Daftary SN (eds), 1994. Shaw's text book of gynaecology. Hawkins and Bourne. (11th edition).

5. John CT. Genital Prolapse. In: Okonofua FE, Odunsi K (eds) Contemporary Obstetrics and Gynaecology for Developing countries. Benin City, WHARC 2003; 214-226.
6. Stanton SL. Vaginal Prolapse. In: Edmonds DK(ed) Dewhurst's Textbook of Obstetrics and Gynaecology for Postgraduates, 6th edition: London, Blackwell Science 1999;462-473
7. Padubidri VG, Daftary SN: Genital Prolapse Howkin's & Bourne Shaw's Textbook of Gynecology, 14th edition:298
8. Kumar P., Malhotra N.: Pelvic Organ Prolapse. Jeffcoate's Principles of Gynaecology, 7th international edition 2008; 283.
9. Bordman R, Telner D, Jackson B, Little D. Step-by-step approach to managing pelvic organ prolapse. Canadian Family Physician; 2007; 53: 485-487.
10. Kudish BI, Iglesia CB, Sokol RJ, Cochrane B, Richter HE, Larson J, et al. Effect of weight change on natural history of pelvic organ prolapse. Obstet Gynecol 2009; 113: 81-88.
11. Hove MC, Pool-Goudzwaard AL, Eijkemans MJC, Steegers-Theunissen RPM, Burger CW, Vierhout ME. Prediction model and prognostic index to estimate clinically relevant pelvic organ prolapse in a general female population. Int Urogynecol J 2009; 20: 1013-1021.
12. Hendrix SL., Clark A, Nygaard I, et al. Pelvic organ prolapse in the Women's Health Initiative: Gravity and gravidity. Am J Obstet Gynecol 2002 June; 186(6) : 1160-1166.
13. Ava Darshan Shrestha, Bimala Lakhey, Jyoti Sharma, Mita Singh Binjwala Shrestha, Sewa Singh. Prevalence of Uterine Prolapse amongst Gynecology OPD Patients in Tribhuvan University Teaching Hospital in Nepal and its Socio-Cultural Determinants. WHRAP-SA submission – Case Study I Nepal.
14. Fatima Sajan, Fariyal F. Fikree. Perceived Gynecological Morbidity among Young ever-married Women living in squatter settlements of Karachi, Pakistan. Journal of Pakistan medical association, 1999; 49: 92-97.
15. Pooja Patil, Abhijit Patil. Evaluation of Pelvic Organ Prolapse In Indian Females. Journal of Evolution of Medical and Dental Sciences. October 2013; 2(13): 7613-20.
16. Shergill SK, Shergill HK, Gupta M, Kaur S. Clinicopathological study of hysterectomies. Journal of the Indian Medical Association ,2002; 100(4):238-246

Source of Support: None Declared
Conflict of Interest: None Declared