

Female Urinary Incontinence – Epidemiology, Causes, Risk Factors and Management in Tribal Rural Women of South Rajasthan

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Abstract

Urinary incontinence has great bearing on quality of life, social life and is of high public health importance [1]. 12 % women of all age and 27% of the women above 50 year of age suffer from urinary incontinence [2]. the risk factors have been history of gynae operations, prolonged labor difficult labor, forceps or vacuum delivery, repeated deliveries, chronic cough ,chronic constipation and failure to get early treatment [3]. Aim of present study has been to determine role of risk factors and to suggest preventive methods, early diagnosis and treatment.

Keywords: Urinary Incontinence, Stress Urinary Incontinence, Urge Incontinence, Urinary Fistulae Prolapse Uterus, Rural women Health.

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INTRODUCTION

The International Continence Society defined Urinary incontinence as “the complaint of any involuntary leakage of urine and which is a social or hygienic problem [4] as an estimate 400 million people around the world are sufferers and it increases with age [5]. 7% of women 20–40 years of age, 17% of 40–60 years of age, 23% of 60–80 years of age have been found to have moderately severe urinary incontinence [6] risk factors for Urinary incontinence include increasing age, parity, vaginal deliveries, obesity, surgery, constipation, and chronic respiratory problems such as cough [7].

The inability to control urine is quite an unpleasant and distressing problem. Although it does not lead to death, it causes substantial morbidity, social seclusion, and psychological stress resulting in impaired Quality of life. Many women are too embarrassed to talk about it and some believe it to be untreatable [8]. Routine speculum examination and simple tests like Q-tip test, pad test and ultrasonography emphasizing on post residual volume can help to know the type of incontinence and factors leading to incontinence [9] conservatively Pelvic Floor Muscle Training remains the first-line treatment for female urinary incontinence [10]. The modified intravaginal slingplasty is a new and interesting procedure [11]. It has replaced the

earlier Kelly's sutures and anterior colporrhaphy and traditional abdominal passage of a needle or packing forceps, to retrieve the sling and tie at proximal urethra [12].

MATERIAL AND METHODS

This is a prospective observational study done in a Tertiary Care Center, hospital of PIMS (PACIFIC INSTITUTE OF MEDICAL SCIENCES, VILLAGE UMARDA, UDAIPUR, RAJASTHAN) from 2015 to 2019 Women who attended gynae opd with urinary complaints of incontinence were interviewed. Risk factors were noted. Age, parity, socioeconomic status, education, age of marriage and residential address were noted. Complaints and details of illness, obstetric history, medical and surgical history was noted. General examination included presence of anemia, blood pressure and edema. Systemic examination included cardiac and lung condition. Diagnostic urodynamic study, uroflowmetry standing stress test resting and stress urethral pressure profile and medium filled cystometry. Ultrasonic examination results were recorded. Blood HB, SUGAR, UREA, CREATININE, BLOOD COUNTS, BT, CT, PT, HIV, HBSAG, VDRL, URINE SUGAR and ALBUMIN, BLOOD GROUPING results recorded. RISK FACTORS AND OUTCOME of conservative and operative treatment was recorded.

OBSERVATIONS

Table-1: Age and parity socio economic and education distribution

S. No	Age in years	No of patients	Percentage
1	30 and less	0	0
2	30-60	18	40
3	61- 80	27	60
4	Parity 2 and below	8	17.77
5	Parity 3 and above	37	82.22
6	High socio economic	0	
7	Low socio economic	45	100
8	Education below 5	45	100
9	Education above 6	0	

Table-2: Clinical presentation and risk factors

S. No	Types Of Incontinence And Causes	Number	Percentage
1	Stress urinary incontinence	28	62.22
2	mixed urinary incontinence	7	15.55
3	Urge incontinence	10	22.22
4	History of gyne surgery	5	11.11
5	Forceps vacuum prolonged labor	15	33.33
6	Diabetic with repeated urinary inf	5	11.11
7	Chronic cough	12	26.66
8	constipation	8	17.77
9	Relief with conservative	5	11.11
10	Relief with vaginal repair	15	33.33
11	Relief with sling surgery	25	55.55

RESULTS

Total 175 patients were studied and 45 were detected to have urinary incontinence (25.71%) 18(40%) patients were 30-60 years of age, 27 (60%) were 61-80 years of age. 8(17.77) were para 2 or below, 37(82.22%) were of 3 and more parity. All patients were from low socioeconomic status and were illiterate. 28 (62.22%) had stress urinary incontinence, 7(15.55%) were mixed and 10(22.22%) had urge incontinence. There was history of gynae surgery in 5(11.11%), 15(33.33%) had prolonged labor, forceps or vacuum delivery. 5 (11.11%) were diabetic with repeated urinary infections. 12 (26.66%) had chronic cough, 8(17.77%) had constipation. 5(11.11%) were successfully treated with pelvic floor muscle training, 15(33.33%) were treated by definitive surgery and vaginal repair, 25(55.55%) got relief from sling surgery.

DISCUSSION

In the present study 45 (25.71%) patients were found to have urinary incontinence. 30% incidence was found by Herzog *et al.*, [13]. Brown *et al.*, [14] found a much higher incidence (55%) and Black *et al.*, [15] higher still (62%). In our study stress incontinence 28(62.22%), mixed 7(15.55%) and urge 10(22.2%) was reported. 13% reported by Brown *et al.*, In our study incontinence was common amongst menopausal women viz, 37(82.22%) whereas Fultz *et al.*, [16] reported a 30-40% incidence. In our study average age was 45 years and mean parity 4 whereas in a study conducted by Swift and Ostergard [17], mean age and mean parity were 59.8 and 2.3 respectively. Prolonged repeated

difficult labor was detected as main risk factor 15(33.33%). Others included vaginal hysterectomy, colporrhaphy (11.11%), chronic cough 12(17.77%) and 5(11.11%) had diabetes and repeated lower urinary tract infections. Majority got relieved 25(55.55%) and 15(33, 33%) were benefited by vaginal repair.

CONCLUSION

Prevalence of Urinary Incontinence is high in rural women. Stress Urinary Incontinence is more common. Generating awareness regarding UI may help to improve health-seeking behavior. There is significant suffering and social life changes in women with Urinary incontinence. History and speculum examination is diagnostic. Conservative pelvic floor muscle training is preventive and sling operation is curative. Institutional deliveries, good antenatal care and preventive pelvic floor muscle training can help reducing incidence and suffering of rural women.

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