AN ANALYTICAL STUDY OF COMMON URINARY PROBLEMS IN FEMALES
S. Anuradha1, B. Ramesh2

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INTRODUCTION: Urinary problems affect many women, and while some of these are not a serious threat to overall health, they are distressing and can negatively affect one's quality of life. AIMS AND OBJECTIVES: To identify the common urinary problems in females, their etiology and symptomatology. MATERIALS AND METHODS: This is a prospective epidemiological study of 500 female patients with urinary problems, who attended the gynecology and urology OPD in our institute which is a tertiary referral Centre. RESULTS: 54.8 percent of women were in 31-50 year age group. Increased frequency and burning micturition were the commonly observed urinary problems. (207 and 346 patients respectively). Incontinence (Both stress and urge) was observed in138 patients (27.6%). 72% women had no primary level of education. 49% women were multiparous (3 or more Para) 23.8% (119 of patients) women still remained undiagnosed. Irritative symptoms and pain hypogastrium were the common presenting complaints in undiagnosed patients. Majority (65.5%) of undiagnosed patients had history of neuropsychiatric problems. CONCLUSION: The present study throws light on the etiology of common urinary problems in females.

KEYWORDS: Common Urinary Problems, Undiagnosed.

INTRODUCTION: Urinary problems are frustrating, embarrassing and affect quality of life. Some problems, especially, incontinence, are considered as a normal phenomenon with increasing age by some women. Prevalence of lower urinary tract symptoms including incontinence is higher in females than in males.(1, 2) One reason is the anatomical difference, female pelvis has wider outlet which predisposes for subsequent pelvic floor weakness.(3) The second is physiological with increasing age. Change in hormonal status and physiology of female urogenital tract predispose to voiding dysfunction.(4) Another factor is silent trauma to the pelvic supports- the utmost important structure for proper functioning of lower urinary tract in the form of multiple vaginal deliveries (Specially unattended home deliveries) and various obstetric and gynaecological surgeries (Caesarean section, hysterectomy etc.)(1,2)

MATERIALS & METHODS: This is a prospective epidemiological study of 500 female patients with urinary problems, who attended the gynecology and urology OPD in our institute. Patients included were above 18 years of age. Patients with major co-morbidity like malignancies of uro-genital tract (cervix, urinary bladder, uterus, vagina, ovary etc.,) were excluded. This study is based on history and clinical examination of patients. Urinary complaints were noted along with the duration, parity of patient, mode and place of delivery. History of any chronic disease or any previous pelvic surgery were noted. Probable diagnosis was made clinically and with help of investigations. Patients were explained about their complaints, investigations and available treatments and motivated to come for follow up for further management.
RESULTS: 54.8% patients were in 31-50 years age group. Burning micturition was the most common urinary complaint (346 patients) followed by increased frequency of micturition (207 patients). 43% patients were suffering from urinary tract infection and E coli was the common offending organism for UTI in our study (70%). 27.6% of patients suffered from urinary incontinence (Both stress and urge incontinence). 50.6 % of patients had prolapse of vaginal wall. 23.8% of patients still remained undiagnosed. More than 50% of undiagnosed females lie in middle age group. 68% of undiagnosed patients took months or years after their symptoms first appeared. Irritative symptoms (Burning micturition (92%) urgency (42%) increased frequency of micturition (41%)) are the most common presenting complaints of these undiagnosed patients followed by pain in lower abdomen. Around 65.5% of patients with undiagnosed disease had history of mental distress or neuropsychiatric disease.

DISCUSSION: This is a prospective epidemiological study of 500 patients attending urology and gynaecology OPD for urinary complaints. Majority of them are from low socioeconomic group and from rural areas.

54.8% of patients were in middle age group (31-50) years. Burning micturition was the most common complaints (346 patients) followed by increased frequency (207 patients). Constipation was present in 49 patients. The only prospective study in constipated elderly with concomitant LUTS demonstrated that medical relief of constipation also significantly improves LUTS.\(^5\)

43% of patients were suffering from UTI which was confirmed by urine culture reports. E coli were the most common organism causing UTI (70%) in our study. The most common organism causing UTI for all gender was E coli and Klebsiella.\(^6\)

27.6% of patients suffered from urinary incontinence (Stress, urge and mixed) According to many studies prevalence of urinary incontinence ranged from 5% to 72% among community dwelling women.\(^7\)\(-\)\(^9\) our results of urinary incontinence lie in the lower end of the range because in our country urine leak is considered an age related problem and consultation is not sought because of embarrassment, lack of awareness and low education level.

Urge incontinence was found relatively more common in our study as compared to stress incontinence. Stress incontinence is more common than urge incontinence according to many studies\(^9\)\(^,\)\(^10\) this difference is in the structure of society and the psychosocial problems faced by Indian women. Urge incontinence can occur as a result of autonomic arousal associated with anxiety and most research into psychiatric aspect of incontinence to date has concentrated on this aspect.\(^11\)\(^-\)\(^13\)

72% women had education below primary level. The lack of education is the root cause of all health related problems. Unawareness about hygiene increases the chances of various infections including urinary infections. 49% women were multiparous (3 or more). Multiparty is one of the major social issues in India.

68% females took months or years to take first consultation after appearance of first symptoms. The reason for this delay was again illiteracy, shyness, unawareness, lack of motivation, low socioeconomic status of patients and lack of easily accessible medical care. In the study that researched women who had incontinence and who delayed seeking help, it was reported that 74% of women had waited for one year and 46% had waited for three years before seeking help.\(^14\)

23.8% of patients remained undiagnosed. They suffer from urinary symptoms with no positive findings. 68% of undiagnosed patients sought medical help months or years after their
symptoms first appeared. 65.5% of undiagnosed patients had history of mental distress or neuropsychiatric disease. The most probable diagnosis of these undiagnosed patients can be explained either on the basis of urethral syndrome or painful bladder syndrome.

The urethral syndrome is defined as women who have symptoms resembling a lower urinary tract infection with no objective findings, no abnormal midstream urinalysis findings, no positive bacterial culture, and no obvious finding on pelvic examination on,[15,16] The etiology of urethral syndrome is obscure and has been attributed to an anxiety neurosis.[17,18] In the present study irritative symptoms (burning micturition (92%), urgency (42%) increased frequency of micturition (41%)) are the most common presenting complaints of these undiagnosed patients followed by pain lower abdomen. Urethral syndrome is thought to affect 20-30% of all adult women and is particularly seen in young women. The exact incidence of urethral syndrome is unknown because of lack of consensus in diagnosis.[19] Risk factors include grand multiparity, delivery without episiotomy and two or more abortions.[20,21] About 58% of undiagnosed patients had 3 or more than 3 deliveries.

According to one study the most striking finding was a significantly higher than normal maximum urethral closure pressure. Abnormal and low urinary flow rates, instability of the intra urethral pressure at rest, incomplete funneling of the bladder neck, and distal urethral narrowing during voiding constitute other typical urodynamic findings in the female urethral syndrome.[22] According to another study, there is strong evidence that the microscopic paraurethral glands connected to the distal third of the urethra in the pre vaginal space are homologous to the prostate.[23]

The possible psychogenic cause that has been used as the basis for treatment with anxiolytic drugs for the past 20 years has been supported by various publications studying the response of such patients to personality tests (Minnesota Multiphasic Personality Inventory),[24] measurements of pelvic floor tension,[25] or external sphincter reactivity.[26] A psychological study sagely suggests that perhaps these were normal women responding to the stress of continuing symptoms and inadequate diagnosis and treatment.[27] As no definitive etiology has been established urethral syndrome is treated on "Trial and error method".

Another syndrome which also cannot be diagnosed easily is painful bladder syndrome (PBS). In 2002, the International Continence Society (ICS) published new recommendations and, notably, proposed that interstitial cystitis should be renamed painful bladder syndrome (PBS).[28] The ICS diagnosis of PBS is based on supra pubic pain related to bladder filling, day or nighttime frequency, and the absence of other obvious pathology.[29] Psychosocial association with painful bladder syndrome is shown by one more study which reported that the syndrome was more common in those who experienced abuse, who are worried about someone close to them and those who were having trouble paying for basics. This suggests that patients with painful bladder syndrome may be benefited from multifaceted approach of combining medical, psychological and cognitive treatment.

CONCLUSION: The urinary problems are very frustrating to patients and not relieved easily, lead to either multi practitioner approach by the patients or they consider them to be normal phenomenon with increasing age and do not come for follow up. This bunch of society needs to be properly diagnosed, counseled, motivated and a combined effort of uro-gynaecologist, physiotherapist and psychologist should be provided in such a tertiary medical Centre for better treatment of patients, to make them comfortable and improve their quality of life. Literacy level, social status, cultural
background and accessibility to health care resources may also contribute to urinary problems therefore an improvement on these factors can lead to improvement in the quality of life of women. This study only gives us an idea about the urinary problems faced by females and their probable causative factors. Many more studies need to be done involving multidisciplinary approach in order to benefit this section of our society.

| Age group | No. of patients | Percentage |
|-----------|-----------------|------------|
| 18-30     | 128             | 25.6       |
| 31-50     | 274             | 54.8       |
| >50       | 98              | 19.6       |

Table 1: Age distribution

| Symptoms                  | No. of patients |
|---------------------------|-----------------|
| Frequency                 | 207             |
| Burning micturition       | 346             |
| Dysuria                   | 185             |
| Lower abd. pain           | 123             |
| Urgency                   | 138             |
| Incomplete voiding        | 84              |
| Constipation              | 49              |
| Urge incontinence         | 74              |
| Stress incontinence       | 64              |

Table 2: Prevalence of urinary problems

| Probable diagnosis       | No. of patients | Percentage |
|--------------------------|-----------------|------------|
| UTI                      | 215             | 43         |
| Incontinence             | 138             | 27.6       |
| Pelvic floor prolapse    | 28              | 5.6        |
| Undiagnosed              | 119             | 23.8       |

Table 3: Probable diagnosis of patients studied

| H/O mental distress/domestic Violence/neuropsychiatric illness | No. of patients |
|---------------------------------------------------------------|-----------------|
| Present                                                      | 78              |
| Absent                                                       | 41              |

Table 4: H/O mental distress/domestic violence/ neuropsychiatric illness in undiagnosed patients
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