

EVALUATION OF LOWER URINARY TRACT SYMPTOMS (LUTS): SEVERITY SCORE AND SYMPTOM ASSOCIATION

Lower urinary tract symptoms are defined from the individual's perspective who is usually, but not necessarily, a patient within the healthcare system. Symptoms are either volunteered by, or elicited from, the individual or may be described by the individual's caregiver.

The LUTS are divided into three groups, (i) storage symptoms (increased daytime urinary frequency, urgency, nocturia, urinary incontinence), (ii) voiding symptoms (slow stream, intermittency, hesitancy, straining) and (iii) postmicturition symptoms (sensation of incomplete emptying, postmicturition dribble) [1].

The storage subset of LUTS includes overactive bladder (OAB) symptoms, which, according to the Standardization Subcommittee of the ICS, is a syndrome characterized by urinary urgency, usually with urinary daytime frequency and nocturia, in the absence of an underlying metabolic or pathological condition, and may or may not be accompanied by urgency incontinence.[1]

Hypothesis / aims of study

1. Assessing number of patients coming with lower urinary symptoms (LUTS) in patients visiting department of obstetrics and gynaecology
2. Assessment of storage symptoms in LUTS (urgency, urge incontinence, frequency) using OABSS (overactive bladder symptom score) questionnaires. [2]
3. Examination of patients with LUTS for its association with pelvic floor dysfunctions.

Study design, materials and methods

This is a prospective study done from February 2016 to February 2017 after the approval from institutional review committee (IRC). Patients visiting outpatient clinic in Department of Obstetrics and Gynaecology with lower urinary tract symptoms (LUTS) were enrolled in the study after informed consent. Patients were assessed for types of LUTS she came for and filled in the per-forma. If patients had urgency, urge incontinence, increased day time frequency then the patients were explained and asked overactive bladder symptom score questionnaire (OABSS) and noted in the per-forma. Patients were then examined for pelvic floor dysfunction, pelvic organ prolapse, SUI, neurological abnormalities for identifying association with the symptoms.

The number of cases collected were plotted in excel chart. Statistical analysis was done using SPSS 11.5. Mean, percentage, standard deviation were calculated for descriptive analysis and non-parametric test, mann-whitney test were applied to find the association of LUTS with likert score from OABSS ($p < 0.05$). Chi-square test and pearsons correlation test was applied for finding relation of pelvic organ prolapse with different lower urinary symptoms ($p < 0.05$).

Results

Fifty-seven patients were enrolled with lower urinary tract symptoms (LUTS) during study period. Forty-six patients had overactive bladder symptoms (OAB). Age ranging from 21 to 80 years was found to have LUTS.

Table.1

Lower urinary tract symptoms(LUTS)	n(%)
Urgency	46(80.7)
Urge incontinence	32(56.1)
Increased day time frequency	43(75.4)
Nocturia	32(56.1)
Stress urinary incontinence	24(42.1)
Hesitancy	6(10.5)
Dribbling	10(17.5)
Sensation of incomplete evacuation	22(38.6)
Urinary retention	5(8.8)
Straining	11(19.3)

Table.2

Pelvic organ prolapse(POP)	n(%)
Anterior segment prolapse	9(15.8)
Apical prolapse	29(50.9)
Posterior segment prolapse	8(14)

Interpretation of results

Majority of patients visiting out-patient with LUTS were found to have urgency, urge incontinence, increased day time frequency, nocturia.

Patients with urgency and urge incontinence showed significant correlation with increasing likert score of OABSS ($p < 0.05$). But the increased day time frequency did not show any correlation with increasing likert score.

Twenty-nine patients had anterior segment prolapse on pelvic examination. Most of the patients with LUTS did not show significant correlation with pelvic organ prolapse, except for patients with urge incontinence, which showed significant correlation with anterior segment prolapse and apical prolapsed ($p < 0.05$).

Concluding message

Lower urinary tract symptoms (LUTS) are frequently under diagnosed and misunderstood in our daily clinical practice in developing country. Thus, proper diagnosis of LUTS with valid assessment tools and treatment, benefits patients with chronic urinary symptoms and helps clinicians to further re-assess the symptomatic relief of the patients during treatment.

References

1. Abrams P, Cardozo L, Fall M et al. The standardisation of terminology of lower urinary tract function:report from the Standardisation Sub-committee of the International Continence Society. *Neurourol Urodyn* 2002;21:167–78
2. Blaivas JG, Panagopoulous G, Weiss JP, Somaroo C. Validation of the overactive bladder Symptom Score. *J urol* 2007; 178(2): 543-7.

Disclosures

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