Review of International Continence Society Terminology

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introduction

• The International Continence Society was born out of the growing interest in bladder and anorectal function and dysfunction. Growing interest was also seen in the use of electrical stimulation to improve continence of urine.

• Lack of agreement on terminology meant that researches were just talking past each other and this hindered international collaboration.
• Initially known as the Continence Club, the first meeting was held in Exeter in 1971.
• The third meeting in Copenhagen in 1973 saw the establishment of the ICS Standardisation Committee, which is responsible for publishing reports on terminology.
Introduction

• The standardisation Sub-Committee of the ICS produced a report entitled, the standardisation of Terminology of Lower Urinary Tract Function published in 2002.

• This report presents the definitions of the symptoms, signs, urodynamic observations and conditions associated with lower urinary tract dysfunction and urodynamic studies, for use in all age groups.
To begin

• Stated in the report, when discussing lower urinary tract disorders;

• When referring to the whole anatomical organ, the correct term is the bladder

• When reference is made specifically to the smooth muscle structure, the correct term is detrusor.
Scope of Report

• The report covers areas including:
• 1. Lower Urinary Tract Symptoms (LUTS)
• 2. Signs suggestive of Lower Urinary Tract Dysfunction (LUTD)
• 3. Urodynamic Observations
• 4. Conditions
• 5. Treatment
Lower Urinary Tract Symptoms (LUTS)

• Symptoms – the subjective indicator of a disease or change in condition as perceived by the patient, carer or partner and may lead them to seek help from a health care professional.

• Symptoms may either be volunteered or described during the patient interview.

• Usually qualitative
In general, LUTS cannot be used to make a definitive diagnosis.

LUTS can also indicate pathologies other than lower urinary tract dysfunction, for example urinary infection.

LUTS are divided into three groups; storage, voiding and post micturition symptoms.
Storage symptoms

• Experienced during the storage phase of the bladder, including daytime frequency and nocturia.

• Increased daytime frequency – complaint by the patient who considers that he/she voids too often by day.

• Equivalent to pollakisisuria used in many countries.
Storage Symptoms

• Nocturia – complaint that the individual has to wake up at night one or more times to void.
• * the term night time frequency is different, as it includes voids that occur after the patient has gone to bed, but before they fall asleep, and also include voids which occur early in the morning which prevents the individual from getting back to sleep.
Storage Symptoms

• Urgency – the complaint of sudden compelling desire to pass urine, which is difficult to defer.
• Urinary Incontinence – the complaint of any involuntary leakage of urine. The term is NOT applicable in infants and small children.
• Incontinence may need to be distinguished from sweating or vaginal discharge.
Storage- incontinence

• Stress urinary incontinence – the complaint of involuntary leakage on effort or exertion, or on sneezing or coughing.

• Urge urinary incontinence – the complaint of involuntary leakage accompanied by or immediately preceded by urgency.

• Mixed urinary incontinence – the complaint of involuntary leakage associated with urgency and also with exertion, effort, sneezing or coughing.
Storage - incontinence

* note- urge incontinence can present in different symptomatic forms, e.g.; frequent small loses between micturition or as a catastrophic leak with complete bladder emptying.
Storage - incontinence

• Enuresis – any involuntary loss of urine.
• Nocturnal enuresis – the complaint of loss of urine occurring during sleep.
• Continuous urinary incontinence – complaint of continuous leaking.
• Other types – may be situational, e.g.; the report of incontinence during sexual intercourse or giggle incontinence.
Storage – bladder sensation

• Normal – the patient is aware of bladder filling and increasing sensation up to a strong desire to void.
• Increased – the patient feels an early and persistent desire to void.
• Reduced – the patient is aware of bladder filling but does not feel a definite desire to void.
• Absent – the individual reports no sensation of bladder filling or desire to void
Storage – bladder sensation

• Non-specific – reports no specific bladder sensation, but may perceive bladder filling as abdominal fullness, vegetative symptoms or spasticity.

• most frequently seen in neurological patients, particularly those with spinal cord trauma or in children or adults with spinal cord malformations.
Voiding

• Experienced during the voiding phase.
• Slow stream – patients perception of reduced urine flow, usually compared to previous performances or in comparison of others.
• Splitting or spraying of the urine stream may be reported.
• Intermittent stream (intermitency) – describes urine flow which stops and starts, on one or more occasions during micturition.
Voiding

• Hesitancy – describes difficulty in initiating micturition resulting in a delay in the onset of voiding after the individual is ready to pass urine.

• Straining – to void describes the muscular effort used either to initiate, maintain or improve the urinary stream.

• Terminal dribble – a prolonged final part of micturition when the flow has slowed to a trickle or dribble.
Post Micturition Symptoms

- Symptoms experienced immediately after micturition.
- Feeling of incomplete emptying – self explanatory term for a feeling experienced by the individual after passing urine.
- Post micturition dribble – when the individual describes the involuntary loss of urine immediately after he or she has finished passing urine, usually after leaving the toilet in men, or after rising from the toilet in women.
Signs Suggestive of Lower Urinary Tract Dysfunction (LUTD)

• Recording of micturition can be in 3 main forms;

• Micturition time chart – this records only the times of micturition, for at least 24 hours

• Frequency volume chart – this records the volumes voided as well as the time of each micturition, day and night for at least 24 hours.
- Bladder diary – this records the times of micturitions and voided volumes, incontinence episodes, pad usage and other information such as fluid intake, the degree of urgency and the degree of incontinence.
The following information can be extracted from bladder diaries:

- **Daytime frequency** – the number of voids recorded during waking hours and includes the last void before sleep and the first void after waking and rising in the morning.

- **Nocturia** – number of voids recorded during a night’s sleep, each void is preceded and followed by sleep.
• Polyuria – the measured production of more than 2.8 litres of urine in 24 hours in adults.
• A few more terms specific to physical examination and organ prolapse were further discussed.
Urodynamic Observations and Conditions

• There are two principal methods of urodynamic ix:

• Conventional; take lace in the urodynamic laboratory and usually involve artificial bladder filling.

• Artificial bladder filling is defined as filling the bladder, via a catheter with a specified liquid at a specified rate.
Urodynamic Observations and Conditions

• Ambulatory urodynamic studies – a functional test of the lower urinary tract, utilising natural filling and reproducing the subject’s everyday activities.

• Natural filling means that the bladder is filled by the production of urine rather than by an artificial medium.
Urodynamic Observations and Conditions

• Both filling cystometry and pressure flow studies of voiding require the following measurement;
• Intravesical pressure – pressure within the bladder
• Abdominal pressure – taken to be the pressure surrounding the bladder. In current practice, is estimated from rectal, vaginal or less commonly from extraperitoneal pressure or a bowel stoma. The simultaneous measurement of abdominal pressure is essential for the interpretation of the intravesical pressure trace.
• Detrusor pressure – that component of intravesical pressure that is created by forces in the bladder wall (passive and active). It is estimated by subtracting abdominal pressure from intravesical pressure.
Urodynamic Observations and Conditions

• Filling cystometry – the method by which the pressure/volume relationship of the bladder is measured during bladder filling.

• Pressure flow studies of voiding are the method by which the relationship between pressure in the bladder and urine flow rate is measured during bladder emptying.
Conditions

• Acute retention of urine – defined as a painful, palpable or percussable bladder, when the patient is unable to pass any urine.

• Chronic retention of urine – defined as a non-painful bladder, which remains palpable or percussable after the patient has passed urine. Such patients may be incontinent.
Conditions

• Benign prostatic obstruction – is a form of bladder outlet obstruction, and may be diagnosed when the cause of outlet obstruction is known to be benign prostatic enlargement, due to histologic benign prostatic hyperplasia.

• Benign prostatic hyperplasia – is a term used (and reserved for) the typical histological pattern which defines the disease.
Conditions

• Benign prostatic enlargement – prostatic enlargement due to histologic benign prostatic hyperplasia.

• The term prostatic enlargement should be used in the absence of prostatic histology.
Treatment

• Lower urinary tract rehabilitation is defined as non-surgical, non-pharmacological treatment for lower urinary tract function and includes;

• Pelvic floor training – defined as repetitive selective voluntary contraction and relaxation of specific pelvic floor muscles.

• Biofeedback – the technique by which information about a normally unconscious physiological process is presented to the patient and/or the therapist as a visual, auditory or tactile signal.
• Behavioural modification is defined as the analysis and alteration of the relationship between the patient’s symptoms and his or her environment for the treatment of maladaptive voiding patterns.

• Catheterization – is a technique for bladder emptying employing a catheter to drain the bladder or urinary reservoir.
Treatment

• Intermittent (in/out) catheterization – defined as drainage or aspiration of the bladder or a urinary reservoir with subsequent removal of the catheter.

• Indwelling catheterisation – an indwelling catheter remains in the bladder, urinary reservoir or urinary conduit for a period of time longer than one emptying.
Treatment

• Bladder reflex triggering – comprises various maneuvers performed by the patient or the therapist in order to elicit reflex detrusor contraction by exteroceptive stimuli.

• The most commonly used maneuvers are; suprapubic tapping, thigh scratching and anal/rectal manipulation.
Treatment

• Bladder expression comprises various manoeuvers aimed at increasing intravesical pressure in order to facilitate bladder emptying. The most commonly used manoeuvers are abdominal straining, Valsalva’s manoeuvers and Crede’ manoeuvers.
• Thank you.