

Referral Support Service

Urology

UR03 Lower Urinary Tract Symptoms in men (LUTS)

Definition

- LUTS in men are related to problems with storage and voiding of urine and can also occur post-micturation.
- Causes include abnormalities or abnormal function of the bladder, prostate, urethra or sphincters.
- 30% of men older than 65 have symptoms which may require treatment. (NICE CG97).

Exclude Red Flag Symptoms

- Visible (frank) haematuria (in adult) and recurrent non-visible haematuria if >40 years of age
- Solid swelling in body of testis
- Palpable renal mass
- Elevated age specific PSA in men with ten year life expectancy
- High PSA (>20ng/ml) in man with clinically malignant prostate or bone pain
- Any suspected penile cancer

History

The NICE guidelines challenge the idea that LUTS are always due to prostatic enlargement and proposes a new thought process in diagnosis. It is advised to try and relate the LUTS to the part of the bladder cycle involved e.g. **STORAGE** (bladder filling), **VOIDING** (bladder emptying) or **POST-MICTURATION** (transition after emptying back to filling).

STORAGE

Symptoms suggestive of storage problems **include urgency, frequency, nocturia, urge incontinence, bladder discomfort**. These symptoms point towards detrusor muscle dysfunction and overactive bladder syndrome.

VOIDING

Symptoms suggestive of voiding problems include **hesitancy and straining, poor stream, spraying of stream, terminal dribbling, feeling of incomplete emptying**. These symptoms point towards **bladder outflow obstruction** and in the vast majority of cases relate to benign prostatic enlargement (BPH). Other causes include prostatitis (pain associated) and prostatic carcinoma (usually advanced to cause LUTS)

POST-MICTURATION

Symptoms suggestive of this include terminal dribbling. This is caused by the failure of the bulbo-spongiosum to contract and empty the distal urethra.

Examination

Abdominal examination including external genitalia and DRE

Investigations

U&E, eGFR, dipstick testing. Offer advice and information on PSA testing and consider performing if have voiding symptoms and/or abnormal feeling prostate.

Advice on PSA testing

Prior to the test men should not have:

- UTI (treat and test after 1 month)
- Ejaculated in previous 48 hours
- Performed vigorous exercise in previous 48 hours
- Had a prostate biopsy in previous 6 weeks
- Had a DRE in previous week.

Ask men to complete a **urinary frequency/volume chart**. [Click here](#)

This helps with pin pointing the diagnosis e.g. High frequency with variable volumes suggests overactive bladder.

The severity of symptoms can be assessed using this [IPSS](#) (International Prostate Symptom Score) calculator

This score should be used to tailor medical therapy. The IPSS has 2 parts:

- i) Symptom Score (0-7 mild, 8-19 moderate and 20-35 severe)
- ii) Quality of life (>4 equates to bothersome effect on QoL)

Treatment

Storage symptoms

- i) Lifestyle measures – Advise on fluid intake, reducing caffeine/alcohol intake and supervised bladder training
- ii) Medication - tolterodine, oxybutynin, solifenacin, mirabegron (see flowchart for overactive bladder in women, [RSS website urogynaecology](#))

Voiding symptoms

Moderate to severe LUTS

- i) Alpha blocker
- ii) Review 4-6 weeks then every 6 to 12 months

LUTS + prostate >30g or PSA >1.4ng/l

- i) 5-alpha reductase inhibitor (Finasteride or dutasteride)
- ii) Review 3 to 6 months and then every 6 to 12 months

LUTS + prostate >30g or PSA >1.4ng/l + severe symptoms

- i) Consider an Alpha blocker + 5-alpha reductase inhibitor
- ii) Review 4 to 6 weeks for alpha blocker and 3 to 6 monthly for 5-alpha reductase inhibitor

Consider offering an anticholinergic to men who still have storage symptoms after treatment successful treatment of voiding symptoms with an alpha blocker alone.

Nocturnal polyuria

- i) Passing >35% of total urinary volume at night (urinary volume/frequency chart)
- ii) Consider late afternoon loop diuretic

(a 30g prostate equates to being able to sweep 2 finger widths and represents clinically significant enlargement. PSA > 1.4ng/l has a higher risk of progression)

[NICE flowchart for Management of LUTS](#)

Post-micturition dribbling

- i) Not caused by obstruction but by lack of contraction of bulbo-spongiosum muscle which functions to empty the urethra.
- ii) Try urinating in seating position or with trousers down i.e not over the waist of trouser or through zip fly. This allows the urethra to be straighter and empty better with gravity.
- iii) Try **post void milking**. Drawing the tips of the fingers from behind the scrotum and pushing up and forward to expel the urine out of the urethra.

Information to include in referral letter

- Medication tried to date
- Bladder diary
- PSA result or IPSS, where relevant
- [Relevant past medical / surgical history](#)
- [Current regular medication](#)
- [BMI/ Smoking status](#)

Investigations prior to referral

- U&E, eGFR, dipstick testing.
- Offer advice and information on PSA testing and consider performing if have voiding symptoms and/or abnormal feeling prostate: [Patient Decision Aid on PSA testing](#) : takes a patient through the risks and benefits and limitations of the PSA test as a screening tool.

Patient Information Leaflets

<http://www.patient.co.uk/health/overactive-bladder-syndrome>

<http://www.patient.co.uk/health/prostate-specific-antigen-psa-test>

References:

BMJ 2010; 340:c2354
NICE CG97