

Management of Lower Urinary Tract Symptoms (LUTS) in Men

History FUNI v SHIP

Symptoms and Severity	
<u>Storage/ OAB</u>	<u>Voiding -Obstructive</u>
<ul style="list-style-type: none"> • Frequency • Urgency • Nocturia(>1) • Incontinence 	<ul style="list-style-type: none"> • Straining • Hesitancy • Intermittent stream • Poor Stream

Examination

- Genitalia- phimosis, urethral stenosis
- Bladder – palpable (retention)
- Digital Rectal Examination (DRE)- Prostate- size- enlarged if larger than ping-pong ball (33ml) and feel consistency

Investigations

- Urine dipstick
- Bloods
 - Glucose
 - U+E
 - +/- PSA

PSA test if:

- Voiding symptoms
- Family history of prostate cancer
- >50 yrs
- DRE abnormal

Counsel on false positive/negative results.

Postpone PSA test if:-

- Active UTI
check PSA 4-6 weeks after UTI
note: it can take 3-6 months for PSA to normalise after a UTI
- Ejaculation/ exercise within last 48 hrs.
- Prostate biopsy last 6 weeks.

Differential diagnosis for LUTS

BPH OAB
 UTI
 Chronic prostatitis
 Urethral stricture/phimosis
 Bladder tumour/prostate cancer
 Drugs (e.g. diuretics, calcium channel blockers, decongestants, antihistamines, ketamine)
 Excessive fluid intake-
 Diabetes/ Heart failure

Food and drinks which irritate the bladder

- Tea/coffee
- Hot chocolate
- Alcohol
- Fizzy drinks
- Green tea
- Blackcurrant
- Citrus
- fruit/juices
- Tomatoes

Red Flags –

Secondary Care Referral

- **Abnormal DRE**
- **Haematuria**
- **RAISED PSA**
- **Elevated Cr related to LUTS**
- **Acute/Chronic retention**
- **1+ UTI**
- **H/O renal stones**

Abnormal Age Specific PSA

50-59	≥3.0
60-69	≥4.0
70 and over	≥5.0

Most cases of LUTS can be dealt with in General Practice

- **3 day fluid volume chart**
(for interpretation - see normal values box on left)
- **International Prostate Symptom Score (IPSS)**

Severe Symptoms
IPSS >20 –REFER
(for flow studies)

Fluid Volume Chart
Normal Values
Number of voids/day-3-8
Number of voids/night 0-1
Total volume/24hrs <3 litres

Total nocturnal urine/24 hr urine should be < 33 %

Volume/void -300-600ml
No. of leakage should be 0

Nocturnal polyuria

- If Isolated nocturia only- then exclude diabetes/ CCF. Others may have disturbance in the normal homeostatic control of fluid balance – excessive urine being produced at night.
- Advice- restrict fluid and food after 6pm/ elevate legs above heart level in the evening before bed/ consider support stockings.
- Furosemide 40 mg at 4pm
- 2nd line Desmopressin- caution risk hyponatraemia – monitor serum sodium 72 hrs after the first dose.

Mild/not bothersome symptoms
IPSS 0-7 No drugs needed

Continence Service- self referral (Tel no. 433517) post void scans, bladder drills, exclude constipation, assess fluid volume)

Lifestyle Advice - non irritating fluids (i.e. water, milk, diluted fruit juice, cranberry juice, decaffeinated/herbal teas/coffee)

Reassess annually
Risk factors for clinical progression

- Increasing age
- IPSS >20
- PSA >1.4

Moderate/bothersome symptoms
IPSS 8-19

STORAGE (OAB)
FUNI symptoms

Anticholinergics
See box 1
e.g. Oxybutynin, tolterodine
Review every 4-6 weeks until stable

Consider mirabegron if anticholinergic contraindicated or not tolerated.

MIXED PICTURE
Treat as Voiding symptoms first with alpha blockers then add anticholinergics.

VOIDING/Obstructive
SHIP symptoms

Small prostate
OR PSA <1.4ng/ml

Large prostate
(bigger than ping pong ball)
OR PSA >1.4ng/ml

Alpha – blockers
See box 2
e.g. Tamsulosin, Doxazosin
in Review at 4-6 weeks

5 alpha reductase inhibitor See box 3
Finasteride
Review at 3-6 months

If still no improvement
Then REFER to secondary care for flow studies and further management/TURP

Consider combination therapy (alpha blocker and a 5 alpha reductase inhibitor) for men with bothersome moderate to severe LUTS and large prostate or PSA >1.4ng/ml

If improvement review 6 monthly

Box 1: Anticholinergics (antimuscarinics)**Review every 4-6 weeks until symptoms are stable and then every 6-12 months**

Antimuscarinics reduce symptoms of urgency and urge incontinence and increase bladder capacity.

Side effects: Dry mouth, dry eyes, nightmares**First Line:**

Consider most cost effective option :

Oxybutynin 2.5- 5mg bd. Side effects especially in the elderly.

Tolterodine 2mg bd (reduce to 1mg bd if necessary to minimise side effects)

28 days costs (Drug Tariff/eMIMS June 2015)

£1.75-£2.40

£2.61-£2.78

For patients who require a once daily preparation:

Darifenacin 7.5 mg- 15 mg od May have fewer CNS side effects

£25.48

If unable to tolerate oral medication , consider transdermal Oxybutynin 36 mg (Kentera®) twice a week.

£27.20

Second Line

Tolterodine MR 4mg od (prescribe as Neditol® XL 4mg od)

£12.89 (Neditol® XL), £25.78 (generic)

Solifenacin 5-10 mg od. May have better efficacy than tolterodine/oxybutynin

£25.78-£33.52

Third Line

If antimuscarinics contra indicated/ not tolerated, mirabegron (Betamiga®) may be considered. Beta 3 agonist. £27.07

Box 2: Alpha blockers**Review at 4-6 weeks and then every 6-12 months**

Alpha blockers ease symptoms by relaxing muscle of the prostate. Work within a few days with full effect being achieved in 6 weeks.

Side effects: Dizziness, light headedness, postural hypotension, retrograde ejaculation, dry mouth, blurred vision, Floppy Iris Syndrome- during cataract surgery (inform ophthalmologist).**28 days costs** (Drug Tariff June 2015)**First line:**Tamsulosin Hydrochloride capsules 400 micrograms at night

£4.22

Alternative options:

Doxazosin 1 mg od initially. Double dose every 1-2 weeks up to maximum of 8 mg daily.

£0.92-£2.24

Alfuzosin hydrochloride 2.5mg bd initially, increasing up to 10 mg daily in divided doses after food.

£3.07-£6.14

Alfuzosin hydrochloride XL 10mg od

£11.68

Box 3: 5-Alpha reductase inhibitors**Review at 3-6 months and then every 6-12 months**

5 alpha reductase inhibitors work by shrinking the prostate. Take up to 6 months to see benefit.

Side- effects: Reduced libido, impotence. Breast tenderness/enlargement (uncommon).**28 days costs** (Drug Tariff June 2015)

Finasteride 5mg od

£1.65

Consult SPC or BNF for further information on specific medicines