

## Male LUTS Clinical Guideline – adapted from NICE CG-97

- **Male LUTS** consist of voiding symptoms, storage symptoms or both.
- **Storage symptoms** include frequency, nocturia, urgency and incontinence.
- **Voiding symptoms** include hesitancy, poor flow, intermittency, incomplete emptying, dribbling

### History

- Record of voiding and storage symptoms
- Medical history including prior surgery
- Medication history
- IPSS questionnaire if available

### Physical examination

- Digital rectal examination
- Inspection of foreskin and urethral meatus

- Prior prostate surgery
- Suspicion of cancer
- Tight urethral meatus or foreskin
- History of haematuria
- Incontinence
- Persistent / recurrent UTI

Refer to Urology

### Initial tests

- Urine analysis (dipstick)
- Flow rate if available
- Post-void bladder scan if available
- Consider blood tests including PSA
- Frequency volume chart if available

- Dipstick haematuria
- Post-void scan > 250ml
- Elevated age-specific PSA (see over)
- Renal impairment thought to be due to lower urinary tract dysfunction

Satisfactory

### Initial management

- Exclude nocturnal polyuria from frequency-volume chart (see Box 5)
  - calculate overnight urine output (includes first morning void)
  - should be < 33% total daily urine output
- Urinary symptoms not affecting QoL may not need immediate intervention
- Characterise symptoms:
  - storage and/or voiding symptoms
  - severity (eg IPSS)

### Abbreviations

IPSS	International Prostate Symptom Score
LUTS	Lower Urinary Tract Symptoms
PSA	Prostate Specific Antigen
UTI	Urinary Tract Infection
OAB	Over Active Bladder
QoL	Quality of Life

### Age-specific PSA levels

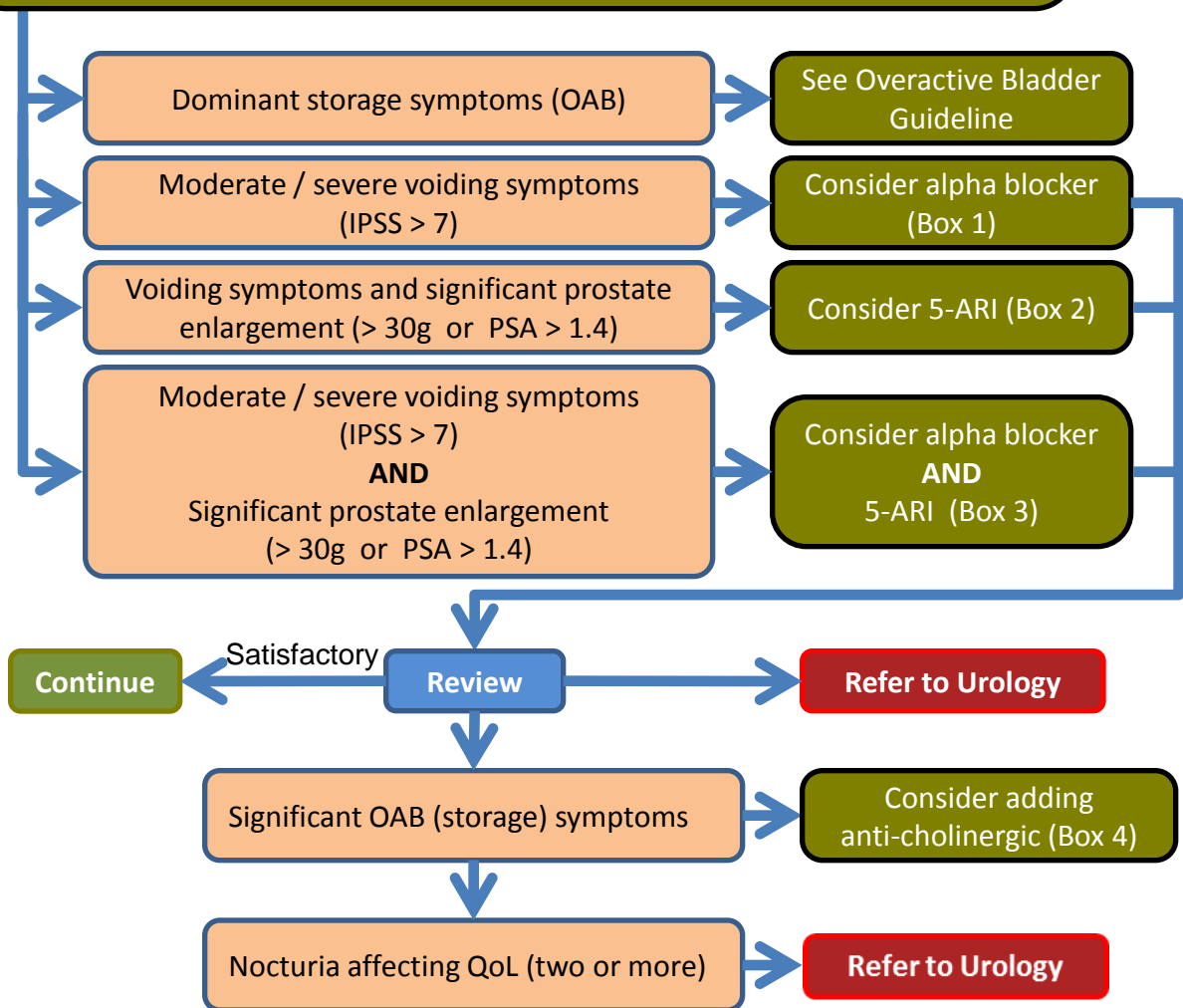
40-49	< 2.5
50-59	< 3.0
60-69	< 4.0
70 +	< 5.0

N.B. Finasteride causes a decrease in Serum PSA concentrations by approximately 50% in patients with BPH even in the presence of prostate Cancer.

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  - severity (IPSS)



# Male LUTS Guideline – drug therapy

## **Box 1: Alpha-blockers**

Common side effects: light-headedness, postural hypotension, retrograde ejaculation

Doxazosin	4 mg od	£1.00 / 28d	
Tamsulosin MR	400 micrograms od	£3.61 / 28d	prescribe as capsules – tablets v. expensive
Alfuzosin MR	10 mg od	£11.68 / 28d	<u>Review at 6 weeks</u>

## **Box 2: 5-Alpha reductase inhibitors (5-ARI)**

Common side effects: reduced libido, impotence

Finasteride	5 mg od	£1.18 / 28d	
Dutasteride	500 micrograms od	£3.00 / 28d	<u>Review at 3-6 months.</u>

## **Box 3: Combination therapy (Alpha-blocker and 5-ARI) – doses as in boxes above**

Finasteride + Doxazosin	£2.18 / 28d	
Combodart® (Dutasteride/tamsulosin)	£18.48 / 28d	
Dutasteride + Tamsulosin	£6.61 / 28d	<u>Review at 6 weeks, then 3-6 months</u>

## **Box 4: Anti-cholinergics / OAB drugs**

See **OAB guidelines** for full details

- Oxybutynin or Tolterodine are first line agents unless contraindicated
- Second line anticholinergics including Propiverine, Darifenacin, Fesoterodine, Solifenacin and Trospium
- Mirabegron (beta-3 agonist) should be considered if:
  - anticholinergics contraindicated,
  - severe side-effects with anti-cholinergics
  - when at least 2 anti-cholinergics not effective

## **Box 5: Nocturia and nocturnal polyuria**

- Consider nocturnal polyuria diagnosis where nocturia is a dominant symptom
  - frequency volume chart to determine fluid input & urine output
  - calculate overnight urine output (includes first morning void)
  - should be < 33% total daily urine output
- Investigate possible causes, for example:
  - Check urine dipstick for glucose and blood sugar (BM stick)
  - Check for ankle oedema and evidence of heart failure
  - Check medications (e.g. diuretics taken in evening)
  - Consider obstructive sleep apnoea

### **Possible management**

- Fluid management (reduce evening fluid intake)
- Consider furosemide 40 mg taken 6 hours before bedtime

N.B. Tadalafil (Cialis®) is **not** recommended for the treatment of BPH (**non-formulary and grey traffic lighted**)

# Male LUTS – Specialist Assessment

• Initial management should follow the above pathway

## History and examination

• As above

## Initial specialist investigations

- IPSS questionnaire
- Frequency / volume chart
- Urine dipstick
- Flow rate and bladder scan
- Offer PSA if prostate cancer or symptomatic prostate enlargement suspected

