

Management of Lower Urinary Tract Symptoms (LUTS) in men

History FUNI v SHIP

Symptoms and Severity

<u>Storage /OAB</u>	<u>Voiding -obstructive</u>
F requency	S training
U rgency	H esitancy
N octuria(>1)	I ntermittent stream
I ncontinence	P oor Stream

Examination

Genitalia- phimosis, urethral stenosis

Bladder – palpable (retention)

Digital Rectal Examination (DRE)-
Prostate- size- enlarged if larger than ping-pong ball (33ml)

- consistency

Investigations

Urine dipstick

Bloods- glucose, U+E,+/-
PSA

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 afterwards.
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.

Age v PSA referral value

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

Differential diagnosis for LUTS

- BPH
- OAB
- UTI
- Chronic prostatitis
- Urethral stricture/phimosis
- Bladder tumor/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 juice
- Citrus fruit/juices
- Tomatoes

Red Flags - Secondary Care Referral Criteria

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

Most cases of LUTS can be dealt with in General Practice

Fluid Volume Chart Normal Values

No. of voids/day = 3-8

No. 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

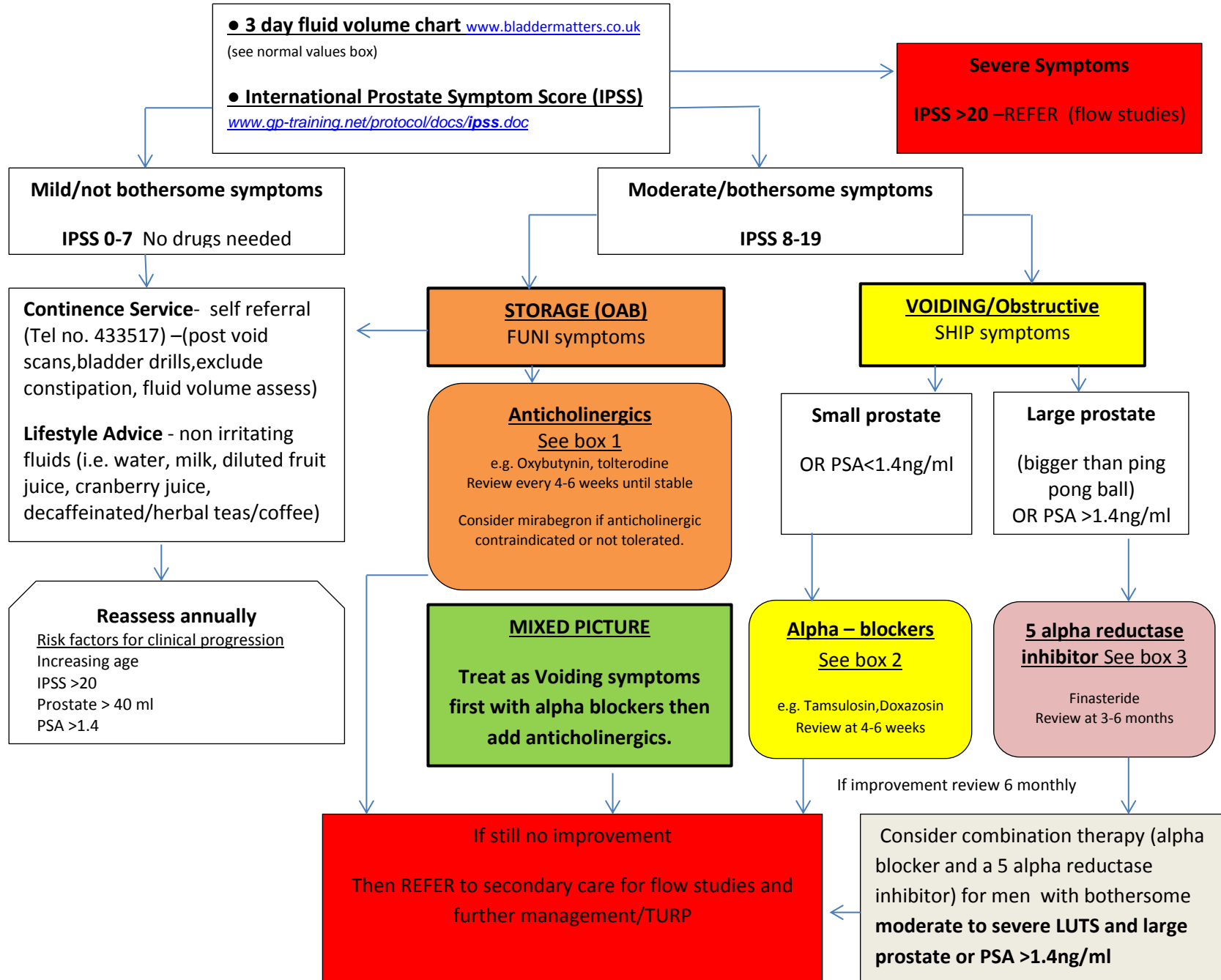
Nocturnal polyuria

Isolated nocturia only- 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.



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