BPH

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GP CARE / BRISTOL UROLOGY ASSOCIATES

Maidstone
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BPH is a very common condition

Up to 24 million men in the EU1,2 >50 years old are affected by moderate-to-severe LUTS due to BPH

Approximately 1/3 of men over 50 have moderate to severe lower urinary tract symptoms

3.2 million men in UK

What do patients say?

Worry that patient may have cancer 71%
Worry about patient’s need for surgery 66%
Deterioration in sex life due to symptoms 66%
Social life affected by patient’s symptoms 47%
Become tired because of waking at night 42%

What do partners say?

What do GP’s & Urologists say?

GP’s worry about missing prostate cancer - only 11% confident in distinguishing between BPH & Prostate-Cancer

Urologists feel that approx 40% of BPH referrals could be managed in primary care

GP’s seek specialist advice in 1/3 of men with LUTS

Why LUTS and not ‘prostatism’ or BPH?

The Factors involved in LUTS

Lower Urinary Tract Symptoms

Why LUTS and not ‘prostatism’ or BPH?

The Factors involved in LUTS

Sells, Donovan, Ewings & MacDonagh. BJU Int 2000, 85, 440-445


**Storage symptoms**
- Urgency
- +/− urgency incontinence
- Frequency
- Nocturia

**Voiding symptoms**
- Poor flow
- Intermittency
- Hesitancy
- Straining
- Terminal dribble

**Post-Micturition symptoms**
- Post micturition dribble
- Incomplete emptying

**Assessment of LUTS**
- History - general
- Storage & Voiding LUTS
- Frequency Volume Chart
  - Consider use of IPSS
  - Ask about bother
- ED & BPH

**Correlation between severity of LUTS & ED**
- MSAM: Multinational survey of the ageing male
  - N = 12,815 men aged 50-80 years

**MSAM – Age / LUTS / ED**
Tip of the iceberg......

Lifestyle Intervention – LUTS/BPH
- In older men, central obesity and higher physical activity associated with increased & decreased risks of incident LUTS, respectively.
- Prevention of chronic urinary symptoms represents another potential health benefit of exercise in elderly men.
- Statin use associated with 6.5 to 7 year delay in the onset of moderate / severe LUTS.

Conclusion – LUTS / ED / Met Syndrome
- Strong link between BPH & ED
- Increasing evidence linking BPH & ED with metabolic syndrome & cardiovascular risk factors
- Primary Care ideal setting for holistic management of male LUTS – but who can deliver this?
- The prostate as the ‘gateway to men's health’

IPSS
- Assess changes in severity with time
- Ask questions: if you were to spend the rest of your life with your urinary condition just the way it is now, how would you feel about that?

Assessment of LUTS
- Mandatory for ALL new patients:
  - General 'focused' physical examination
  - Abdominal examination
  - External genitalia
  - DRE
- Investigations:
  - Urine dipstick
  - Serum creatinine – only if clinical indications of renal impairment
  - PSA

Uncomplicated vs Complicated
- Uncomplicated LUTS
  - Gradual onset
  - Impalpable bladder
  - Normal external genitalia
  - Benign feeling prostate
  - Normal PSA
  - No infection / haematuria
- Complicated LUTS
  - Rapid onset
  - Palpable bladder
  - Painful / enlarged prostate
  - Polypoid bladder
  - Incontinence
  - Haematuria
  - Severe symptoms

Don’t Forget Overactive Bladder
- Absence of or minimal VODING symptoms
- Syndrome of:
  - Urgency
  - Urgency incontinence
- Frequency
- Nocturia
- Treat with anti-cholinergic, NOT alpha blocker
- Bladder training (supervised)
Management strategies

- Exclude contributing causes (e.g. heart failure).
- Self-management:
  - Caffeine avoidance
  - Evening fluid restriction
  - Timing of diuretic
  - Bladder training
- Reassurance
- Containment devices

Alpha-blockers

- E.g. Tamsulosin, Alfuzosin, Doxazosin
- Reduce tone of bladder neck / prostate
- Fast onset: 4-6 weeks
- Symptom control quickly achieved
- Does not prevent progression of BPH (AUR / surgery)

Tamsulosin & ejaculation

- Does not induce retrograde ejaculation
- Does reduce seminal emission

Mechanisms:

- Peripheral effect on seminal vesicles and vas deferens via high affinity on 1α-adrenoceptors
- Central effect (brain) via high affinity on D2 and 5-HT1A receptors.

5α-reductase inhibitors

- E.g. Finasteride or Dutasteride (Avodart/Combodart)
- Inhibit conversion of testosterone to DHT
- Reduce prostate volume
- Most effective in prostates >40g
- Improves symptoms and decreases rate of AUR / surgery
- S/E: fatigue, ED, loss of libido, gynaecomastia
- Full effects take >6 months to develop

Risk Factors for Progression

- Progression:
  - Deterioration in symptoms
  - Acute retention
  - BPH-related surgery
  - Age over 70 with LUTS
  - Moderate to severe symptoms i.e. IPSS > 7
  - PSA > 1.4 ng/ml
  - Prostate volume over 30ccs (i.e. feels enlarged on DRE)
  - Flow rate <12 ml/sec

Risk of AUR by Baseline Serum PSA in Untreated Men (Placebo Group)

- 5-fold increase in risk (versus)

Management Strategy

- Conservative measures
- Alpha blocker for symptom control
- Consider SAB for:
  - Men with risk factors for progression
  - Men with symptoms uncontrolled on monotherapy
  - Especially if considered high risk for prostate cancer

ABEJAC Study

<table>
<thead>
<tr>
<th>Serum PSA level (ng/ml)</th>
<th>Tamsulosin 0.8mg OD</th>
<th>Alfuzosin 10mg OD</th>
<th>Placebo</th>
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</thead>
<tbody>
<tr>
<td>&lt;1.4</td>
<td>+0.4</td>
<td>+0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>≥1.4</td>
<td>+1.2</td>
<td>+0.7</td>
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AVJAC Study

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<td>&lt;1.4</td>
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<td>1.0</td>
</tr>
<tr>
<td>≥1.4</td>
<td>+1.2</td>
<td>+0.8</td>
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5α-ARIs reduce PSA level

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<th>Treatment month</th>
<th>Placebo</th>
<th>Dutasteride</th>
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<tr>
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<tr>
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Risk of AUR by Baseline Serum PSA in Untreated Men (Placebo Group)

- 5-fold increase in risk (versus)
Combination Therapy
- ATOPS & CombAT
- Most effective for controlling symptoms
- Most effective for reducing progression to AUR or surgery
- At 4 years in CombAT combination reduced relative risk of AUR/surgery by 70% vs tamsulosin

Promising laser interventions:
- Holmium laser enucleation
- Green light laser
- Minimally invasive treatment:
  - TURP
  - TUNA

CombAT: The relative risk of AUR or BPH-related surgery vs tamsulosin at 4 years

CombAT: Mean change from baseline in IPSS greater with dutasteride + tamsulosin combination therapy

PDE Inhibitors for LUTS / BPH
- PDE inhibition improves CombAT and LS in CombAT trials
- Significant improvement in IPSS scores
- No change seen in urodynamic parameters
- May be more effective when combined with alpha blockers

IIEF EF Domain: Mean Change from Baseline

Total IPSS: Mean Change from Baseline

IPSS Total: Mean Change from Baseline

IIEF-EF Total: Mean Change from Baseline

Surgery for BPH
- TURP remains gold standard
- Promising laser interventions:
  - Holmium laser enucleation
  - Green light laser
- Minimally invasive treatment:
  - TURP, TUNA, TAT
Other Tips

- Add anti-cholinergic to control bothersome STORAGE symptoms in men with BPH
- Consider afternoon diuretic (Furosemide 20-40mg @ 4pm) for nocturia
- Desmopressin second line for nocturia
- Refer to secondary care if treatment unsuccessful

Summary

- LUTS common, under reported & bothersome
- Strong link with ED / Metabolic Syndrome
- Holistic assessment – symptoms, fluid intake
- Lifestyle intervention especially fluid intake
- Medical therapy according to symptoms
- BPH is progressive condition
- Refer if not responding or atypical