

# PROSTATE DISEASE BPH AND PROSTATITIS

## DIAGNOSIS AND MANAGEMENT

## GP SUMMARY GUIDE

### BENIGN PROSTATIC HYPERPLASIA (BPH)

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- BPH is the non-cancerous enlargement of the prostate gland
- Whilst not normally life threatening, BPH can impact considerably on quality of life

#### The GP's role

- GPs are typically the first point of contact for men with BPH
- The GP's role in the management of BPH includes clinical assessment, treatment, referral and follow-up

### Diagnosis

#### Medical History

- Lower urinary tract symptoms (LUTS)

#### Urinary symptoms of BPH

- Hesitancy
- Weak and poorly directed stream
- Straining
- Post-urination dribble or irregular stream
- Urinary retention
- Overflow or paradoxical incontinence
- Urgency
- Frequency
- Nocturia

Note: Some men with BPH may not present with many, or any, symptoms of the disease.

#### Symptom score

- Evaluation of symptoms contributes to treatment allocation and response monitoring
- The International Prostate Symptom Score (IPSS) questionnaire is recommended

Refer to Comprehensive Guide 7

#### Physical examination

- Digital rectal examination (DRE): can estimate prostate size and identify other prostate pathologies
- Basic neurological examination
- Perianal sensation and sphincter tone
- Bladder palpation
- Caliber of the urethral meatus

#### Investigations

- **Urine analysis:** midstream urine: microscopy, culture and sensitivity (MC&S)
- **Prostate specific antigen (PSA) levels:** while PSA levels are mostly used as a marker of prostate cancer, PSA levels can be elevated as a result of non cancerous prostate disease (BPH and prostatitis)

#### PSA LEVELS FOR DIFFERENT AGE GROUPS OF WESTERN MEN

Age range years	Serum PSA (ng/ml) median	Serum PSA (ng/ml) upper limit of normal
40-49	0.65	2.0
50-59	0.85	3.0
60-69	1.39	4.0
70-79	1.64	5.5

#### Other PSA tests:

- PSA velocity or doubling time: if the PSA level doubles in 12 months it may indicate prostate cancer or prostatitis. An elevated PSA and a stable velocity suggests BPH
- Free-to-total PSA ratio: high ratio (>25%) suggests BPH; low ratio (<10%) suggests prostate cancer

Refer to Early Detection of Prostate Cancer guideline (TCCQ) at [www.andrologyaustralia.org](http://www.andrologyaustralia.org)

#### Creatinine levels

#### Post-void residual urine (ultrasound)

#### Optional investigations (usually by the Urologist)

- Uroflowmetry (Specialist only)
- Pressure-flow study
- Endoscopy
- Urinary tract imaging
- Voiding chart

Refer to Comprehensive Guide 7

### Management

#### Treatment

##### Watchful waiting:

- Optimise through reassurance, education, periodic monitoring and lifestyle modifications

##### Medical therapy:

#### α-blockers

- Suited to patients with moderate/severe LUTS
- All α1-blockers (Tamsulosin, Terazosin, Prazosin) have a similar clinical efficacy (side-effect profiles favour Tamsulosin)

#### 5α-reductase-inhibitors

- Suited to patients with moderate/severe LUTS and enlarged prostates (>30-40ml)
- Finasteride reduces prostate volume by 20-30% and seems to have similar clinical efficacy

#### Combination therapy:

- α-blocker with 5α-reductase-inhibitor
- Has been shown to be more beneficial and durable than the monotherapy of either substance

#### Surgical therapy:

- Transurethral resection of the prostate (TURP) for prostates 30-80ml
- Transurethral incision of the prostate (TUIP) for prostates <30ml and without middle lobe
- Open prostatectomy or TURP for those >80ml
- Laser ablation or resection of BPH available in specific surgical centres. Laser surgery regarded as equivalent efficacy to TURP
- Other options also available

#### Specialist referral

##### Indicators for referral to a Urologist

- The patient's symptoms become more serious: their symptom score moves into the 'severely symptomatic' category
- The patient's symptoms significantly interfere with their quality of life - score of 5 'unhappy' or 6 'terrible' on the IPSS
- After an episode of urinary retention, urinary infection, haematuria
- No response to treatment
- A risk of prostate cancer exists
- Post void residual urine on ultrasound assessment >100ml

## Follow-up

It is appropriate for the GP to monitor and follow-up a patient with respect to all the above treatment modalities. If a specialist is involved, he/she may refer the patient back to the GP for ongoing follow-up as directed.

- ▶ **Clinical notes:** Men who have had TURP remain at risk for prostate cancer and need routine prostate cancer checks.

### Recommended follow-up timeline after BPH treatment

Treatment modality	First year after treatment			Annually thereafter
	6 weeks	12 weeks	6 months	
Watchful waiting	X	X	✓	✓
5 $\alpha$ -reductase inhibitors	X	✓	✓	✓
$\alpha$ -blockers	✓	X	✓	✓
Surgery or minimal invasive treatment	✓	✓	✓	✓

## PROSTATITIS

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- Prostatitis is an inflammation of the prostate gland
- It can be a result of bacterial or non-bacterial infection
- Acute bacterial prostatitis, the least common form, can be life threatening if the infection is left untreated
- Whilst not normally life threatening, prostatitis can impact considerably on men's quality of life

### The GP's role

- GPs are typically the first point of contact for men with prostatitis
- The GP's role in the management of prostatitis includes clinical assessment, treatment, referral and follow-up

## Diagnosis

### Medical history

- ☐ Urinary symptoms
- ☐ Pain

#### Symptoms of prostatitis

- ☐ Dysuria – painful urination
- ☐ Urgent need to urinate
- ☐ Frequent urination
- ☐ Painful ejaculation
- ☐ Lower back pain
- ☐ Perineal pain
- ☐ Chills and/or fever
- ☐ Muscular pain
- ☐ General lack of energy

### Investigations

**Digital rectal examination (DRE):** prostate tenderness or swelling

**Prostate specific antigen (PSA) levels:** elevated PSA levels

- PSA velocity: if the PSA level doubles in 12 months it may indicate prostate cancer or prostatitis

#### Urine analysis:

- First pass urine: Chlamydia urine PCR test
- Midstream urine: MC&S

▶ Refer to Comprehensive Guide 7

## Management

### Treatment

- There are several therapeutic options available. Evidence for benefits of these treatment options is limited; however, they may be trialed with the patient
- With respect to management by the Specialist, use of the following forms of treatment will vary according to the individual, their condition and the stage of their treatment
- Most patients at some stage in their treatment however will have antibiotic therapy

**Bacterial prostatitis** (acute and chronic) can be treated using antibiotics. Once diagnosed, rapid treatment is essential to avoid further complications.

**Chronic nonbacterial prostatitis** (chronic pelvic pain syndrome) causal treatment is difficult and cure is often not an option. Treatment focus is on symptom management, to improve quality of life.

### Medication options

- **$\alpha$ -blockers**
- **Antibiotics** (not all antibiotics penetrate the prostate glands)
  - Recommend: Norfloxacin, Ciprofloxacin, Trimethoprim, Sulphamethoxazole/ Trimethoprim, Erythromycin, Gentamicin
  - Young men with confirmed Chlamydia prostatitis: Doxycycline (Vibramycin®)
- **Muscle relaxants:** Diazepam, Baclofen
- **Analgesics**
- **Non-steroidal anti-inflammatory drugs**
- **5 $\alpha$ -reductase-inhibitors:** Finasteride

▶ Refer to Comprehensive Guide 7

### Surgical options\*

- Transurethral incision of the bladder neck
- Transurethral resection of the prostate

\*Surgery has a very limited role and requires an additional, specific indication e.g. prostate obstruction, prostate calcification

### Other options

- Lifestyle changes: avoid activity that involves vibration or trauma to the perineum e.g. bike riding, tractor driving, long-distance driving, cut out caffeine, spicy foods, alcohol, avoid constipation
- Pelvic floor relaxation techniques
- Prostate massage
- Supportive therapy: biofeedback, relaxation exercises, acupuncture, massage therapy, chiropractic therapy and meditation
- Heat therapy

### Specialist referral

#### Indicators for referral to a Urologist:

- When the GP is not confident in managing the condition
- If the GP is concerned there are other potential diagnoses, particularly prostate or bladder cancer
- Those who do not respond to initial first-line therapy such as antibiotics and/or  $\alpha$ -blockers. For these patients, more invasive investigations, such as cystoscopy and transrectal prostate ultrasound scan, are commonly considered necessary

### Follow-up

- The need for specialist follow-up depends on the patient's progress
- Most specialists will refer back to the GP to monitor the progress of the patient
- The specialist will seek re-referral if the patient's progress is not appropriate
- A GP can re-refer if they do not feel comfortable in managing a relapse