Medical Measures for BPH

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BPH FYI...

Despite a decade of increasing familiarity and comfort in the medical management of men with clinical benign prostatic hyperplasia (BPH), it is obvious there is still much to learn. We now appreciate that its pathophysiology has a number of overlapping causes, each of which can also occur independently (Figure 1).

Point #1

Initial evaluation of a man presenting with benign prostatic hyperplasia requires an assessment of symptom severity and bother. This may be done through informal questioning or use of a formal symptom score. This information will help assess the need for intervention and provide a baseline against which to compare future changes.

Medical history must include past and current illnesses, as well as prior urethral injury, infection or instrumentation.

A focused physical examination, including a digital rectal examination, is mandatory.

Urinalysis is required to rule out diagnoses other than BPH that may also cause lower urinary tract symptoms (LUTS).

Prostate-specific antigen (PSA) should be offered to patients who have at least a 10-year life expectancy and for whom knowledge of the presence of prostate cancer would change management.

These tests represent the minimum evaluation; more sophisticated studies (*e.g.*, cystourethroscopy, urodynamics, *etc.*) may be required, depending upon individual circumstances.

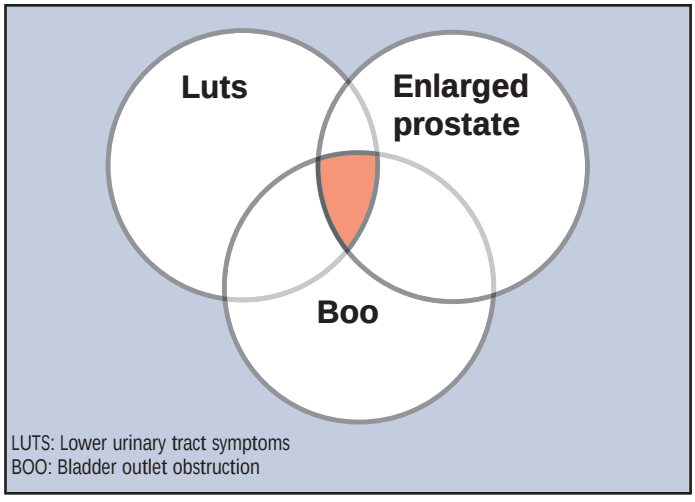

Figure 1. Pathophysiology of BPH.

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Table 1
Predictive risk factors for progressive clinical BPH

- Increasing age
- Prostatic enlargement
- Elevated prostate-specific antigen
- Lower urinary tract symptoms
- Decreased urinary flow rate

Point #2

Traditionally, management of men with BPH focused on improvement in LUTS. While this is an important short-term goal, there is a growing appreciation that BPH is a progressive condition that can lead to serious long-term problems, such as renal failure, bladder stones, urinary tract infections, hematuria and urinary retention.

Longer term goals need to be addressed and should include prevention of progression and complications, preservation of quality of life, minimization of adverse effects of treatment and optimization of cost-effectiveness.

The utility of clearly defined predictive risk factors for progressive clinical BPH (Table 1) will help the physician identify who requires close observation and early intervention.

BPH FYI...

Many patients can achieve improvements in LUTS by implementing simple changes in lifestyle, such as timed voiding, reduction of tea, coffee and alcohol, elevation of legs prior to retiring for the night, fluid restriction and avoidance of some drugs, such as decongestants.

There is a lot of interest in phytotherapeutic agents and, although there are no convincing, well-designed studies confirming efficacy, there is also no evidence to show that they are harmful.

Point #3

The two types of drugs available to treat BPH include the alpha-blockers, which relax smooth muscles in and around the prostate and bladder neck and improve urination through sympathetic activity blockade, and the 5-alpha reductase inhibitors, which reduce the level of dihydrotestoterone and improve urination by decreasing the size of the prostate. Both should be taken indefinitely with an expectation of return of symptoms if stopped.

The alpha-blockers (alfuzosin, doxazosin, tamsulosin and terazosin) work within a few days to weeks and are effective for prostate glands of all sizes. Although there are differences in their adverse-event profiles, all four agents have equal clinical effectiveness.

The latter three may require dose-titration. Drug choice will depend on the patient's co-morbidities, side-effect profile and tolerance.

The 5-alpha reductase inhibitors (dutasteride and finasteride) are only useful in men with large prostates. Their benefit may not be apparent for several months, since it takes time for the prostate to shrink. Both prevent progression of BPH and reduce the risk of acute urinary retention and the need for future BPH-related surgery.[1,2] They have similar effectiveness and adverse-event profiles. This class of medical therapy reduces the risk of developing prostate cancer by as much as 25%.[3]

Table 2
Combination therapy most effective for BPH*

- 66% reduction in risk of BPH progression
- 64% reduction in worsening symptoms
- 81% reduction in risk of AUR
- 67% reduction in need for invasive BPH therapy

BPH: Benign prostatic hyperplasia
AUR: Acute urinary retention

*Versus placebo at four years

Point #4

Two drug therapies using an alpha-blocker and a 5-alpha reductase inhibitor activates two distinct and complementary mechanisms of action and has been shown to be the most effective form of medical therapy for BPH (Table 2). The downside includes higher up-front costs, more adverse events and, possibly, decreased drug compliance. Further data analyses are ongoing to define which subgroups of patients will be the ones best served by this approach. There is evidence that patients treated with combination therapy for six to 12 months can have the alpha-blocker successfully discontinued for at least four to 12 weeks.[4]

Point #5

The investigation and medical management of men with BPH continues to evolve as we improve our knowledge of the best use of current medications alone and in combination. Further direction is available in the Canadian Guidelines for the Management of BPH, recently released by the Canadian Prostate Health Council and Canadian Urological Association.[5]

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References
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