Treating BPH

Evolving treatment increases patient options

By Scott Pike, MD & Peter M. Knapp, Jr., MD

Benign prostatic hyperplasia (BPH), or enlarged prostate, is a condition that affects many men. While the exact incidence is unknown, a clear trend in prostate growth and worsening symptoms is noted with advancing age. Common symptoms include weak urinary stream, the sensation of incomplete bladder emptying, dribbling after voiding, frequent urination particularly at night (nocturia), straining to begin urination, the sudden urge to urinate or interrupted stream. Severe cases can lead to blood in the urine (hematuria), development of bladder stones or acute urinary retention and subsequent renal failure.

Evaluation includes a history and physical examination including a digital rectal examination (DRE), PSA test and AUA symptom index. The AUA symptom index is a questionnaire designed to determine the severity and bother of a patient's symptoms; seven parameters are evaluated and rated on a scale of 1 to 5. An AUA score of 0 to 7 means that the condition is mild, 8 to 19 is considered moderate and 20 to 35 is severe.

Additional in-office testing may help establish the diagnosis and determine treatment selection. Testing may include measurement of urinary flow rate, residual urine, cystoscopy and urodynamic testing, and transrectal ultrasound to accurately measure prostate size.

Post void residual (PVR) measures the volume of urine that remains in the bladder after voiding. This can be measured noninvasively with a transabdominal ultrasonography.

Cystoscopy is often performed if invasive treatment is considered. Cystoscopy is performed in the office to evaluate the lower urinary tract anatomy and other potential sources of obstruction.

Urodynamic studies may be performed to evaluate bladder function. These can help differentiate bladder outlet obstruction from patients with a neurogenic bladder.

Several nonsurgical and surgical treatment options exist for BPH. As long as the condition is not life-threatening, treatment is often dictated by a patient's symptoms. Patients with mild-to-moderate symptoms are often initially managed with watchful-waiting and/or medical therapy.

When medical therapy is initiated, alpha-blockers are commonly prescribed as first line treatment. This class of medication, which includes terazosin, doxazosin, tamsulosin and alfuzosin works to relax the prostatic smooth muscle, thereby improving symptoms of BPH. Alpha-blockers demonstrate a rapid clinical response, which is dose-dependent. Their safety and efficacy has been demonstrated in multiple studies. Side effects including dizziness, orthostasis, rhinitis and abnormal ejaculation can be

seen in some patients.

A second class of drugs, known as 5-alpha reductase inhibitors (finasteride, dutasteride), work by reducing prostate volume. Whereas alpha-blockers are rapid in their onset of action, 5-alpha reductase inhibitors may take up to six months before maximal reduction in prostate volume is achieved. Long term safety and durability of efficacy has been demonstrated in multiple studies. 5-alpha reductase inhibitors are also useful in the management of prostate-related bleeding. Side effects including decreased libido, ejaculatory disorder and erectile dysfunction are seen in a small number of patients. 5-alpha reductase inhibitors have demonstrated a decrease in the incidence of acute urinary retention and the need for surgical intervention for BPH. In candidates for prostate cancer screening, a PSA should be determined before and roughly six months after the initiation of 5-alpha reductase inhibitors. If an appropriate decrease in the PSA is not appreciated, a prostate biopsy is strongly considered.

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Combination therapy with both an alpha-blocker and a 5-alpha reductase inhibitor has been demonstrated as the most effective means of preventing disease progression.

Patients that fail to improve with medical therapy or cannot tolerate the side effects of medical therapy or simply wish to stop taking their medication may elect to have more definitive treatment. Further therapeutic options include office based procedures performed under local anesthesia or outpatient laser procedures utilizing a general anesthetic.

The office based procedures include transurethral microwave thermotherapy (TUMT) and transurethral needle ablation (TUNA) using radiofrequency. The office based procedures can be performed in less than one hour and allow patients to return to regular activity the following day. Results vary but many patients can stop taking medication one to two months following the procedure.

Laser vaporization (PVP) of the prostate is performed as an outpatient under general anesthesia. The procedure is performed in 30 to 60 minutes and provides rapid improvement in urinary symptoms and return to regular activity in 5 to 7 days. Most patients are able to discontinue medication shortly after surgery.

Other surgical procedures include transurethral resection of the prostate (TURP), holmium laser enucleation of the prostate (HOLEP), and open prostatectomy. These procedures are sometimes needed in certain circumstances and require additional recovery time.

Treatment of obstructive BPH has evolved over the years offering patients many treatment options including medications and minimally invasive treatments in the office or outpatient surgery center. Urology of Indiana continues to utilize the most advanced treatment techniques to effectively treat patients with obstructive voiding symptoms secondary to BPH.

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