Cleveland Clinic

Benign Prostate Enlargement

What is it?

The prostate is a male reproductive gland in the pelvis that makes components of semen, the fluid that carries sperm. In younger men, the prostate is roughly walnut-sized. As a man gets older, his prostate almost always grows bigger. If this enlargement isn't due to cancer, it's called benign prostatic hyperplasia, or BPH. (Hyperplasia means an overabundance of cells.) By age 60, half of all men will have prostate enlargement. By age 85, the number jumps to 90 percent. About half of men with BPH will develop symptoms that require treatment (often called lower urinary tract symptoms, or LUTS).

What are the symptoms?

The prostate gland surrounds the urethra, the tube that carries urine outside the body. So an enlarged prostate can narrow the urethra, causing:

- Difficulty starting urination
- Slowness or dribbling during urination
- Frequent urination
- A feeling of urgency or sudden need to urinate
- Awakening often at night to urinate

As the prostate gets larger, there may be complications, including:

- Bladder stones
- Bladder infection
- Bloody urine
- Accidental urine leakage after the sudden need to urinate, called urge incontinence
- Kidney damage caused by the back pressure of retaining excess urine in the bladder
- Sudden complete blockage of the urethra, preventing urination

Should I worry about cancer?

Having BPH doesn't increase the risk of developing prostate cancer. BPH and prostate cancer have similar symptoms, and a man with BPH may have undetected prostate cancer at the same time. Prostate cancer screening tests pose some potential risks as well as potential benefits. You should discuss the pros and cons with your urologist or family doctor to help you decide whether and when to be tested.

How is BPH diagnosed?

Your doctor will perform a digital rectal exam, after reviewing your medical history and doing a thorough physical exam. The prostate is next to the rectum, so your doctor places a gloved, lubricated finger in your rectum to probe for prostate growths or enlargement. There may be several other checks:

- A survey to assess your lower urinary tract symptoms
- A flow study to measure the speed of your urine stream
- A measurement of how much urine is left in your bladder after urination, using a painless ultrasound scan
- A visual examination of your urethra and bladder, using a fiberoptic tool called a cystoscope

How is BPH treated?

If your symptoms are mild, dietary changes — for example, avoiding caffeine, especially in the evening — may be enough to provide relief. In that case, your doctor may recommend only continued observation, to make sure your symptoms don't worsen. This is called watchful waiting. If your symptoms become bothersome, or if you develop complications, there are several treatment options:

Medications

Urologists generally use two kinds of medication to treat BPH. One kind, called alpha-blockers, is used to relax the muscle around the prostate to lessen the pressure on the urethra, making it easier to urinate. Examples of alphablockers are terazosin (brand name Hytrin®), doxazosin (Cardura®), alfuzosin (Uroxatral®) and tamsulosin (Flomax®). The most common side effects are lightheadedness and weakness. The other class of BPH medications is 5-alpha-reductase inhibitors. They block the body's production of dihydrotestosterone (DHT), a hormone that plays a major role in prostate growth. Finasteride, marketed as Proscar[®], and dutasteride (Avodart[®]) often are prescribed. Their side effects may include impotence (the inability to maintain an erection) and a reduced sex drive. Finasteride and dutasteride may take as long as six months to have their full effect on symptoms, but they are the only medications that reduce the risk of developing urinary retention or the future need for prostate surgery.

Surgery

Surgeons have devised several ways to improve urine flow in patients with severe BPH. The most common procedure traditionally has been transurethral resection of the prostate (TURP). A small electrically charged cutting tool is inserted into the penis and threaded through the urethra to the prostate, where bits of tissue are cut away. Average hospital stay is 1 to 2 days. Though effective, TURP's potential side effects include bleeding, impotence and incontinence (the inability to control urination).

A less complicated BPH surgery is transurethral incision of the prostate (TUIP). Rather than removing tissue, the surgeon widens the urethra by making several cuts at the juncture of the urethra and bladder, as well as in the prostate itself. This relieves some pressure on the urethra, allowing more urine to flow.

There are other, minimally invasive, ways of vaporizing the obstructive prostate tissue, using either a button-shaped plasma electrode (transurethral button vaporization) or a laser (photoselective vaporization of the prostate, or PVP). These techniques usually are done in an outpatient setting but may require a urinary catheter overnight.

To schedule an appointment for BPH screening, treatment or other prostate problems, call the Glickman Urological & Kidney Institute appointment line at 216.444.5600 or 800.223.2273, extension 45600.