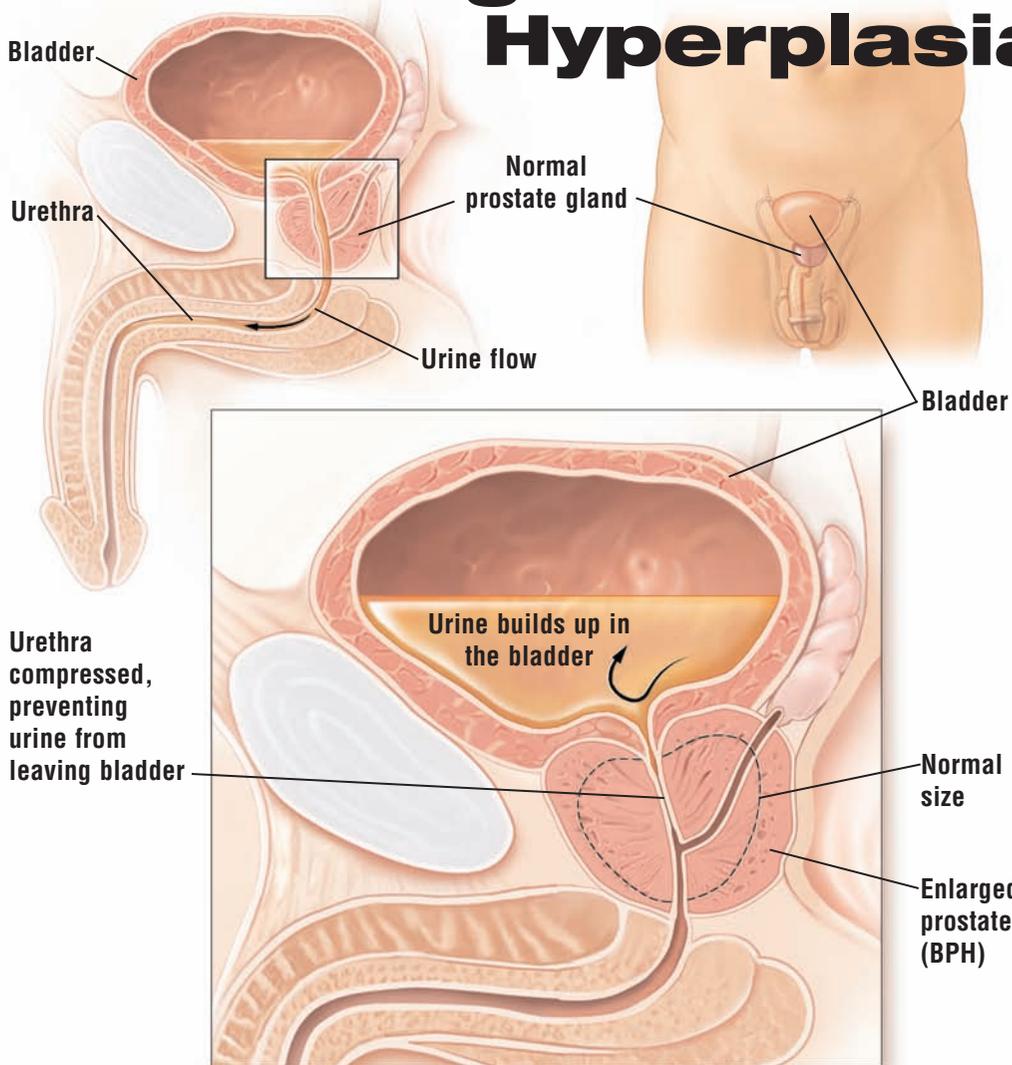


Benign Prostatic Hyperplasia



Benign prostatic hyperplasia (BPH) is a term that refers to an enlargement of the prostate gland in older men, a condition that can cause a variety of urinary tract symptoms. Men with BPH experience frequent nighttime urination, an urgency to urinate, problems starting and stopping while urinating, and dribbling at the end of urination. These complaints are all related to the effect of prostate gland enlargement on the urethra, the tube through which urine passes. The prostate gland slowly enlarges as a man ages, and it presses on the urethra, interfering with the flow of urine through this tube. Although the symptoms of BPH are not dangerous, the pressure on the urethra as the prostate gland enlarges can lead to incomplete emptying of the bladder, bladder wall irritation, and recurrent urinary tract infections.

There are two types of approved medications to treat BPH: hormone blockers, which stop the prostate gland from enlarging, and alpha-blockers, which relax the bladder muscles to make it easier to urinate. Sometimes these two types of drugs are used together, since they work in different ways to relieve symptoms of BPH. If a patient's symptoms do not improve with these medications or if the prostate enlargement is significant, there are nonsurgical and surgical therapies available that are effective in certain cases. Nonsurgical treatments include heat therapy using different forms of energy to destroy the extra prostate gland tissue pressing on the urethra. Surgical treatment has been the standard therapy for BPH for many years, and there are several types of surgical procedures available, depending on the individual patient and the degree of prostate enlargement.

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TEAR ALONG PERFORATION

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A Typical Part of Aging

For reasons that are not well understood, the prostate gland slowly enlarges as men grow older. Although some degree of prostate enlargement occurs in most men as they age, symptoms of BPH do not affect all men with an enlarged prostate. More than half of men older than 60 experience some urinary symptoms from BPH; the incidence increases as men reach their 70s and 80s. BPH is more common in men with a family history of prostate enlargement and in those from American or European descent.

The symptoms of an enlarged prostate gland are related to the pressure placed on the urethra, the tube that carries urine from the bladder. As the urethra narrows, the bladder responds with irritation and incomplete emptying, leading to the gradual development of urinary urgency, frequency, hesitancy, and dribbling. Symptomatic BPH should be evaluated by a doctor and treated appropriately to avoid complications such as chronic urinary tract infections and kidney scarring. Since these symptoms can also be a result of other conditions such as prostate or bladder cancer, a visit to the doctor will determine the cause and plan for treatment.

The diagnosis of BPH is made after a careful history of symptoms. A digital rectal examination is performed to feel the back of the prostate gland through the wall of the rectum and determine if it is enlarged. A urine sample may be tested for indicators of infection, and a prostate-specific antigen blood test may be ordered to look for possible prostate cancer. In some cases, an ultrasound or biopsy of the prostate tissue is taken. Some tests can be used to measure urinary blockage, including cystoscopy and urine flow studies.

Ways to Treat BPH

In cases of mild or moderate prostate enlargement with few symptoms, treatment with drugs or surgery may not be recommended right away, since symptoms may disappear with time. However, most men with bothersome symptoms of BPH will eventually need treatment to relieve their symptoms and prevent urinary tract complications.

Medications: Drugs used to treat the symptoms of BPH include those that slow prostate growth and those that relax the bladder smooth muscle to make it easier for urine to flow from the bladder through the urethra. Drugs that slow the growth of the prostate gland include finasteride and dutasteride; these medications stop the production of a hormone that causes the prostate gland to enlarge. Side effects from these drugs are mild but may include transient problems with sexual interest or performance. Drugs that relax the bladder smooth muscle are known as alpha-blockers, including alfuzosin, doxazosin, tamsulosin, and terazosin. Side effects of alpha-blockers include dizziness, low blood pressure, and fatigue. In some patients, a combination of two medications that work in different ways may be a more effective option than a single drug.

Nonsurgical and Surgical Therapy: There are a number of nonsurgical and surgical procedures used to relieve BPH symptoms. Heat therapy is a nonsurgical treatment that uses energy sources such as microwaves, radiowaves, electricity, or lasers to destroy excess prostate gland tissue. Surgical removal of excess prostate tissue can be performed if the prostate is seriously enlarged or if other treatments are not effective.

Symptoms may improve with a few lifestyle changes, such as limiting intake of liquids for several hours before bedtime to reduce nighttime frequency and completely emptying the bladder during urination. Men with prostate enlargement should not take over-the-counter decongestant medicines, since these drugs cause urinary retention by tightening the muscles of the urethral opening.



When the prostate gland enlarges, it presses on the urethra, interfering with the flow of urine. This pressure can cause a variety of urinary tract symptoms.