



Enlarged Prostate

(Benign Prostatic Hyperplasia)

WHAT IS BENIGN PROSTATIC HYPERPLASIA?

Benign prostatic hyperplasia (BPH) is enlargement of the prostate gland. As men age, it's common for the prostate to get larger. BPH does not lead to prostate cancer.

The prostate gland is located in the abdomen just below the bladder. It's about the size and shape of a walnut. As part of the male reproductive system, it produces a milky white fluid that helps to transport sperm during ejaculation. The prostate also helps to control the flow of urine (urination).

DID YOU KNOW?

BPH affects more than half of men in their 60s and most men in their 70s and 80s.

WHAT ARE THE SIGNS AND SYMPTOMS OF BPH?

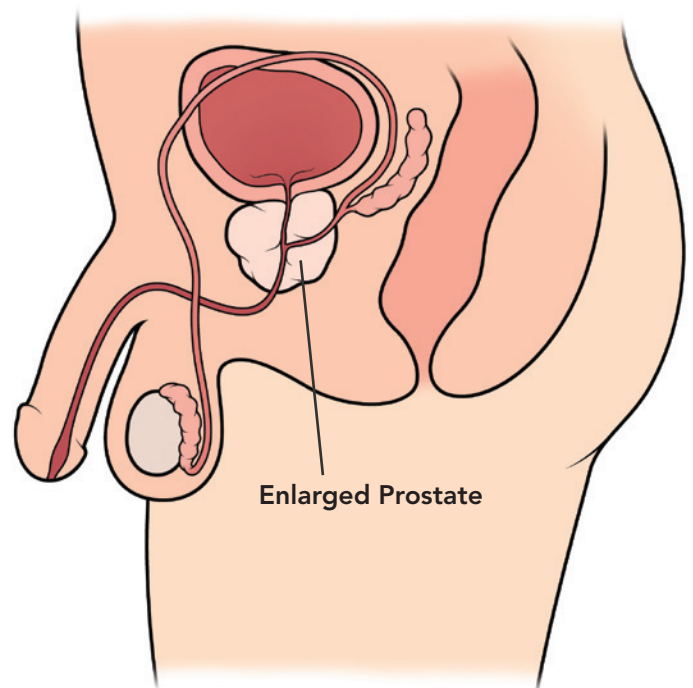
As the prostate enlarges, it can squeeze the urethra (the tube for urine to pass out of the body). Common symptoms of BPH are

- Frequent urination (especially at night)
- Urgent need to urinate
- Trouble starting to urinate
- Weak urinary flow that may be interrupted (dribbling)
- Feeling that the bladder is not empty after urination

HOW IS BPH DIAGNOSED?

To determine if you have BPH, your doctor will

- Take your medical history
- Ask you to describe the severity of your symptoms
- Examine your abdomen to check for bladder enlargement
- Perform a digital rectal exam to determine the size and shape of your prostate
- Order a urinalysis (a urine exam) to look for signs of infection and/or to see if the kidneys have been affected (and sometimes to measure urine that is left in the bladder after urination)
- Order a prostate-specific antigen (PSA) test to screen for prostate cancer



HOW IS BPH TREATED?

Treatment for BPH and its symptoms usually begins with your family doctor, who may refer you to a urologist. Your doctor will base your treatment on the severity of your symptoms and how they affect your quality of life, rather than on medical need (unless the kidneys are affected). The most common complaints leading to treatment are interrupted sleep because of the need to urinate at night, and frequency and urgency with inability to control urination on a regular basis.

Although for most men many of the symptoms do not get worse for years, and may even get better with time, a rare complication of BPH involves a sudden and complete bladder blockage. This needs to be treated immediately.

For moderate symptoms that interfere with daily life, there are two types of drug treatment:

- 5-alpha-reductase inhibitors (finasteride and dutasteride)
- Alpha-adrenergic blockers (doxazosin, terazosin, alfuzosin, tamsulosin, and silodosin).

The reductase inhibitors help to increase urinary flow and reduce prostate size. It may take six months to get the maximum benefit from these drugs. They also lower your risk of needing surgery for BPH or being unable to urinate at all. Alpha-adrenergic blockers increase urinary flow, and reduce urgency and urination at night. Unlike reductase inhibitors, they work quickly. These drugs also reduce blood pressure. In patients with heart disease they may also cause chest pain (angina). In general though, they are well tolerated. Some men may benefit from using both drugs at the same time. One or both drugs are usually continued for the rest of your life. If you stop taking them, your symptoms will return.

The main surgical treatment for BPH is a transurethral resection of the prostate (TURP). Surgery is an option if you

- Are not able to completely empty your bladder (which can damage the kidneys)
- Are not able to urinate
- Are not able to hold your urine (incontinence)
- Have bladder stones
- Have repeated infections that are difficult to treat (due to incomplete emptying of the bladder)
- Have large amounts of blood in the urine on a regular basis

Although surgery can improve symptoms of BPH, it is less common since hormonal treatments became available. Surgery can cause long-term complications including erectile dysfunction (inability to get an erection) and incontinence. And a small number of men need a second operation because of continued prostate growth or a narrowed urethra caused by the first surgery.

There is growing interest in the use of drugs made from plants to treat BPH, particularly saw palmetto. In several recent studies, this plant extract was not shown to be effective in treating BPH or its symptoms.

Questions to ask your doctor

- Are my symptoms from BPH?
- What are my treatment options?
- What are the advantages and disadvantages of each of my treatment options?
- Should I see a urologist for my condition?
- Should I see an endocrinologist for my condition?

RESOURCES

- Find a urologist (AUA Foundation: The Official Foundation of the American Urological Association): www.urologyhealth.org or call 1-800-828-7866
- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- MedlinePlus (National Institutes of Health): www.nlm.nih.gov/medlineplus/ency/article/000381.htm
- National Kidney and Urologic Diseases Information Clearinghouse (National Institutes of Health): <http://kidney.niddk.nih.gov/kudiseases/pubs/prostateenlargement>
- Mayo Clinic: www.mayoclinic.com/health/prostate-gland-enlargement/DS00027
- American Urological Association-Patient information about BPH: www.urologyhealth.org/content/moreinfo/bphtreatment.pdf

EDITORS

Adrian Dobs, MD
William Rosner, MD
Jean Wilson, MD

The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

