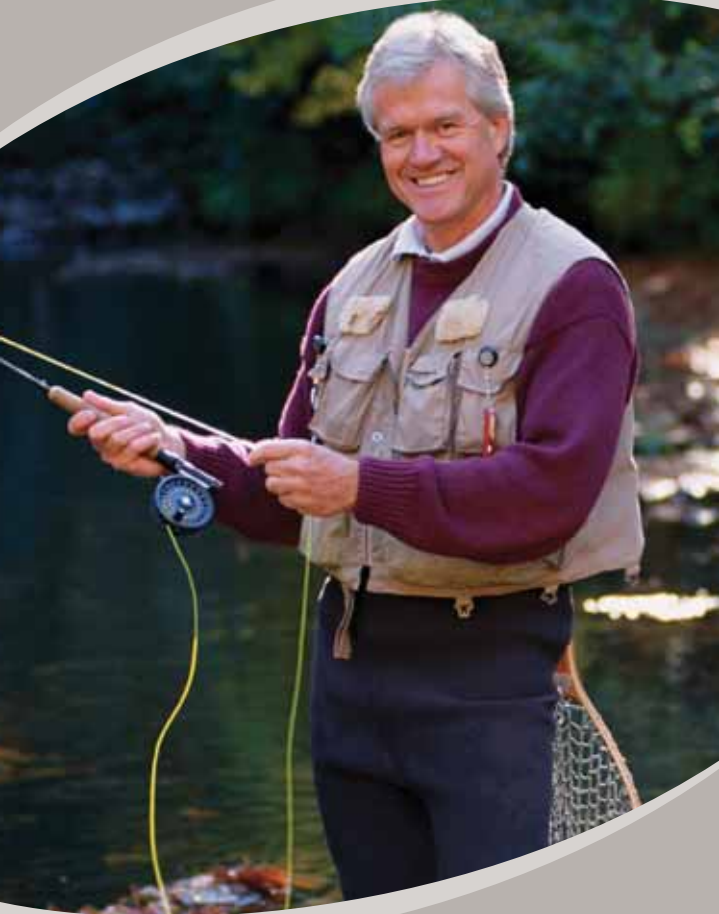




Prostate Enlargement:

Benign Prostatic Hyperplasia





The prostate is a walnut-shaped gland at the base of the bladder. It's part of the male reproductive system. Its job is to produce fluid for semen. But when things go wrong, the gland can cause problems with urination, not sex. That's because the *urethra*, the tube that carries urine out from the bladder, runs through the prostate (see figure). As men get older, the gland enlarges, and it may cause *benign prostatic hyperplasia* (BPH) in the process. Even a small amount of prostate enlargement can make it hard to urinate.

What Causes BPH?

The cause of BPH is one of the great mysteries of modern medicine. Doctors know that two things are essential: 1) age and 2) testosterone. But they don't know why some men develop BPH as they age while others don't.

Although the cause of BPH is unknown, there are some important risk factors to know about, such as:

- Abdominal obesity
- Cigarette smoking
- Lack of exercise
- Poor diet
- Excessive alcohol intake

These same risk factors contribute to heart disease, cancer, stroke, and diabetes, so healthy living is a smart choice for everyone.

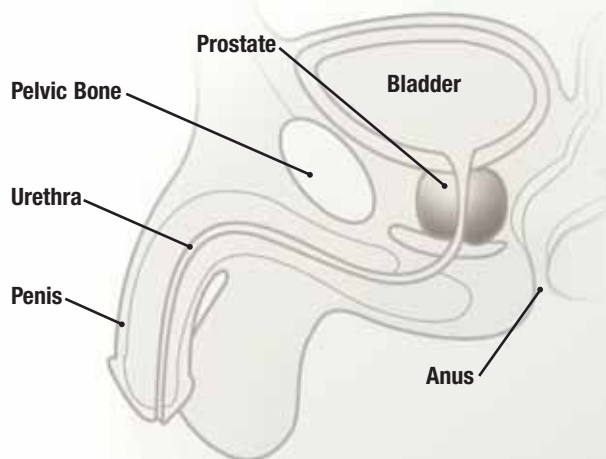
Symptoms

The symptoms of BPH vary. One group of problems is caused by **urethra narrowing**; picture the way you can slow the flow of liquid through a straw by pinching it between your thumb and index finger. These problems include:

- Having to **strain** and **wait** to start urinating
- Having a **weak, slow stream**
- **Taking a long time** to urinate and dribbling at the end
- **Not emptying the bladder completely.** Sometimes this means a man cannot urinate at all, an urgent problem called *acute urinary retention*.

The other group of symptoms is due to **irritation of the bladder**. They include:

- An **urgent, sometimes uncontrollable** need to urinate, often passing only small amounts of urine.
- **Frequent nighttime urination**



AUA Symptoms Index for BPH

The American Urologic Association (AUA) has developed a test for BPH. You can take the test here to see where you stand. Simply circle one answer to each question. Then add up the numbers to determine your score.

(Circle one answer for each question)

1. During the last month or so, how often have you had a sensation of not emptying your bladder completely after you finished urinating?
▶ 0 1 2 3 4 5
2. During the last month or so, how often have you had to urinate again less than 2 hours after you finished urinating?
▶ 0 1 2 3 4 5
3. During the last month or so, how often have you found that you stopped and started again several times when you urinated?
▶ 0 1 2 3 4 5
4. During the last month or so, how often have you found it difficult to postpone urination?
▶ 0 1 2 3 4 5
5. During the last month or so, how often have you had a weak urinary stream?
▶ 0 1 2 3 4 5
6. During the last month or so, how often have you had to push or strain to begin urination?
▶ 0 1 2 3 4 5
7. During the last month or so, how times did you typically get up to urinate from the time you went to bed at night until the time you got up in the morning?
▶ 0 1 2 3 4 5

AUA scores: 0–7 are considered mild; 8–19 indicate moderate symptoms; 20–35 suggest severe BPH. Talk to your doctor about your score to see if you should be treated for BPH.

Diagnosis

Diagnosis is easy; your doctor may perform a simple evaluation of symptoms using the AUA index or similar questions. Your doctor may also check for other conditions, such as diabetes and neurological disorders. A digital rectal exam may be needed to evaluate the size of the prostate and to check for abnormalities that could indicate cancer or infection. Urinalysis and blood tests of kidney function are also important.

Treatment

In a few men, BPH is severe enough to require immediate treatment. But because BPH progresses slowly, most men can decide for themselves when and if they should be treated.

Watchful Waiting

For men with low AUA scores, it's the only option. It's a reasonable choice for men who find that simple lifestyle adjustments can take the BPH bother out of daily life. Here are a few tips:

- **Reduce your intake of fluids**, especially after dinner.
- **Limit your intake of alcohol and caffeine.**
- **Avoid drugs that stimulate muscles in the bladder neck and prostate**, such as *pseudophedrine* and other decongestants.





- Avoid medications that **weaken bladder contractions**, such as antihistamines, anti-depressants, or drugs that control spasms.
- Ask your doctor to **lower your dosage or substitute another drug for diuretics**, which increase the need to urinate.
- **Never pass up a chance to use the bathroom**, even if your bladder does not feel full. Take your time and empty your bladder as much as possible.
- When you are in new places, **learn the location of the bathroom** before you really need it.

If you can live comfortably with BPH, do it. But if your symptoms bother you, several options are available.

Medications

Prescription drugs can reduce the symptoms of BPH. Two types are available:

- **Alpha-blockers**, such as *terazosin*, *doxazosin*, *tamsulosin*, *alfuzosin* relax smooth muscle cells in the prostate and bladder. All of these drugs act within weeks, and about 70% of men with BPH improve.
- **Hormone blockers**, *finasteride* and *dutasteride*, actually shrink the gland. These drugs work slowly, over 6 months or longer, and are only helpful for men with large prostates.
- **Combination therapy** with an alpha-blocker and a hormone blocker may reduce the risk of complications for men with moderate or severe BPH.

Surgery

Although many men with BPH do well with drugs, others still need surgery. **Transurethral resection of the prostate (TURP) has been the most common BPH treatment.** It does not require an incision through the skin. However, the 90-minute operation does require a hospital stay and anesthesia. A resectoscope is passed through the urethra, cutting away prostate tissue that is slowing the flow of urine. A catheter is left in place to empty the bladder for a day or two, after which the patient can urinate on his own.

Although results vary, **TURP reduces BPH symptoms in 80% to 90%** of patients. Complications may include infection or bleeding, dry ejaculation (50% to 75%), erectile dysfunction (5% to 10%), and incontinence (1% to 3%). Because the prostate can grow back, up to 20% of TURP patients require more treatment within 10 years.

New Choices for an Old Problem

Many new, less-invasive surgical treatments are being introduced just as medical therapies are improving. And all these choices are arriving when new information suggests that it's safe for men who are not greatly bothered by their symptoms to choose watchful waiting rather than any active therapy. It's a new era that will allow well-informed men to take control of an old problem.





To learn more about BPH,
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