

Benign prostatic hyperplasia (BPH) is the medical term for having a non cancerous enlarged prostate. The prostate is a gland of the male reproductive system and its main function is to produce fluid for semen, which transports sperm. It is located in front of the rectum and just below the bladder, wraps around a tube called the urethra, which carries urine from the bladder out through the tip of the penis and is usually about the size of a walnut.

As men get older, the prostate can become problematic. The prostate tends to enlarge with age and as a consequence, it begins to squeeze the part of the urethra that passes through the prostate, resulting in urination problems. Often then the bladder is not able to empty as well often becomes a trigger for urinary tract infections. Then pain and burning during urination may become present. Some men even go on to suddenly become unable to urinate or suffer and gradually develop bladder and/or kidney damage.

BPH does not always need to be treated. It is common practice to only treat BPH if the symptoms are severe enough to bother you or if your urinary tract is seriously affected

Currently the following are standard treatments:

Watchful waiting

If you have BPH but do not find your symptoms problematic, you and your doctor may decide on a program of "watchful waiting." During this time it is imperative that you have scheduled examinations with your physician to gauge whether the symptoms are improving or declining.

Alpha-blocker drug treatment

Alpha-blocker drugs work by helping to relax muscles in the prostate. Alpha blockers include doxazosin (Cardura®), prazosin (Minipress®) and terazosin (Hytrin®). Cardura and Hytrin are the only alpha blockers now approved by the Food and Drug Administration for BPH treatment. After taking these medications, men often notice that their urinary symptoms improve with this treatment. The long term risks and benefits are not currently known because these treatments are relatively new to the market. However, symptoms improvement probably continues for several years. Side effects of alpha blockers can include headaches or feeling dizzy, light-headed, or tired. Low blood pressure or difficulty getting an erection also may occur in some patients.

Finasteride drug treatment

Finasteride (Proscar®) has been found to cause the prostate to shrink, and many men notice improvements in their urinary systems with this drug. Although early improvements may be seen, you may need a trial of 6 to 12 months before you feel the full benefits of Finasteride. Long term studies have shown symptom improvement continuing for four to six years. Finasteride has been shown to reduce the risk of acute urinary retention and surgery, lower prostate-specific antigen (PSA) levels.

Holistic Therapies

There are also a number of holistic therapies available for symptomatic relief for BPH. These include red clover, saw palmetto, and pygeum africanum.

Saw Palmetto, whose botanical name is *Serenoa repens* is found in the southeast corner of the United States. The berries of the saw palmetto are commonly used for the treatment of benign prostatic hyperplasia or BPH and chronic nonbacterial prostatitis. Research has demonstrated the berries to have a beneficial effect of reducing the amount of dihydrotestosterone (DHT) by inhibiting the conversion of testosterone to DHT, blocking the 5-alpha-reductase, and the actions of inflammatory substances that contribute to BPH. Research has also demonstrated saw palmetto to reduce the size of prostate, frequency of urination, and to act as a urinary antiseptic and diuretic. Though side effects are rare, mild GI disturbances have been noted. One should begin to use saw palmetto only after a diagnosis and under the guidance of a medical practitioner. Further studies are needed, to compare the effects of herbal therapy with those of pharmaceutical therapy that have demonstrated a beneficial influence on the underlying symptomatic BPH.

Pygeum is a large evergreen tree that grows in southern Africa. It is also known by its Latin names *Pygeum africanum* or *Prunus africana* and the extracts of its bark are used in the treatment of genito-urinary conditions. The active groups of pygeum are Phytosterols (sitosterols), Pentacyclic triterpenoids, and ferulic esters. The phytosterols, act as anti-inflammatory agents by inhibiting the synthesis of prostaglandins. By blocking enzymatic activity, the pentacyclic triterpenoids also act as anti-inflammatory agents. The ferulic esters of long-chain fatty acids act by inhibiting the absorption and metabolism of cholesterol. Pygeum has been studied in numerous clinical trials and found to be effective in treating a wide range of genito-urinary conditions particularly with benign prostatic hypertrophy (BPH) but also with the conditions of frequent urination, residual urine, voiding volume, prostate volume, nocturnal frequency, and peak flow.

Surgery

Surgery often does the best job of relieving symptoms, but it also has more risk than the other treatments.

There are three types of surgery for BPH:

Transurethral resection of the prostate (TURP)

TURP is the most common BPH surgery and is a proven way to treat BPH effectively by relieving symptoms by reducing pressure on the urethra. After the patient gets anesthesia, the doctor slides a special instrument through the penis into the urethra. No skin must be cut. The doctor then removes an inside part of the prostate. After TURP, patients usually need to have a catheter (a tube in the penis for draining urine) for two to three days and a hospital stay for that long as well. Most patients find that their symptoms improve quickly after TURP and remain that way for many years.

Transurethral incision of the prostate (TUIP)

TUIP may be used when the prostate is slightly enlarged. In TUIP, an instrument is passed through the urethra to make one or two small cuts in the prostate, leaving behind all tissue. These cuts reduce prostate pressure on the urethra, making urinating easier.

Open prostatectomy

Open prostatectomy may be used if the prostate is very large. In this procedure, a cut is made through the skin into the lower abdomen to remove an inside part of the prostate.

New treatments for BPH appear every year: Laser surgery is one example. Use of a laser is still surgery, and doctors do not yet know if its long-term benefits and risks are higher or lower than with standard surgery. In the short term, laser surgery may produce less bleeding and shorter hospital stays than TURP does, but patients do not have as much improvement in their symptoms. Following laser surgery, patients may require a catheter for a longer period of time than with standard surgery.

Electrovaporization (Vaportrode®) is a new modification of the standard TURP operation. It uses high levels of electrical current to destroy prostate tissue. The procedure may produce less bleeding and shorter hospital stays than TURP, but the long-term benefits and risks are not known.

Thermal therapy is an outpatient procedure that uses either microwave energy (e.g., Prostatron®) or radiofrequency energy (transurethral needle ablation, or T.U.N.A. ®) to heat the prostate through a catheter inserted into the urethra. These procedures are still being evaluated by doctors, and the long-term benefits and risks are not known.