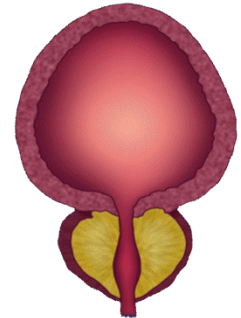


Benign Prostate Hyperplasia (BPH)

What is the Prostate?

The prostate is part of the male urinary and reproductive system. In a young man it is about the size of a walnut. The prostate is found below the bladder and in front of the rectum. The urethra, which carries urine from the bladder out through the penis is connected to the prostate at the urinary sphincter muscle in the pelvis.

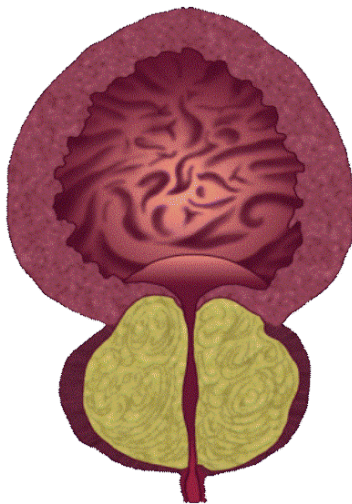
The prostate's main job is to make fluid for semen and to deliver the fluid during ejaculation.



The normal prostate sits below the bladder and above the pelvic floor.

What is Benign Prostate Hyperplasia (BPH)?

Benign Prostate Hyperplasia BPH is an enlarged prostate. BPH is benign. It is not cancer. It does not cause or lead to cancer. However, BPH and cancer can happen at the same time.



The enlarged prostate causes obstruction. The bladder responds by becoming thick and trabeculated.

Is BPH Common?

Yes, BPH is common. Around age 40 a man's prostate begins to grow and change. About half of all men between ages 51 and 60 have signs and symptoms from an enlarged prostate. Up to 90% of men over age 80 prostate-related problems.

As the prostate enlarges it presses against the urethra, restricting the flow of urine. The restriction of flow leads to a slow urinary stream, urinary hesitancy, an interrupted stream, incomplete emptying and getting up at night to urinate. Urine obstruction can also lead to urinary frequency and urgency as the bladder muscles compensates for the obstruction.

Why does the prostate grow with age?

The causes of BPH are not well-understood. The male hormone testosterone encourages growth of the prostate (lowering testosterone can cause the prostate to shrink) but there is no explanation why the prostate gets larger under the influence of the testosterone.

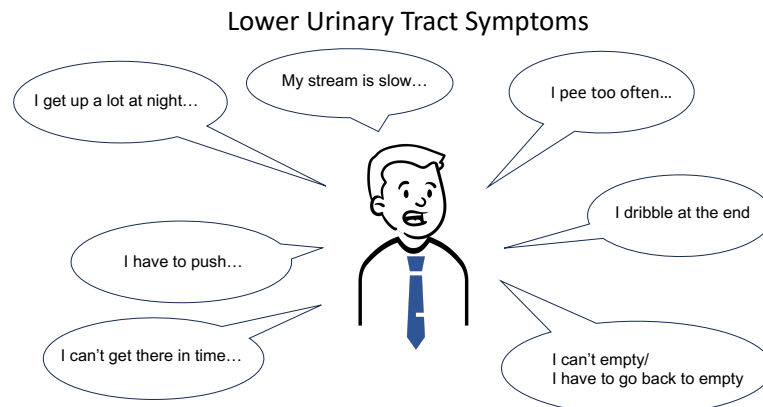
Can BPH be Prevented?

There is no sure way to stop BPH. There are medications that can lower the effects of testosterone, but those medications have potential side effects of lowering the testosterone such as sexual dysfunction, metabolic problems of weight gain and heart disease, and loss of bone health.

How do I know if I have BPH?

If you are a man over 50 with urinary symptoms the most likely cause is BPH.

Symptoms include feeling that the bladder is full even right after urinating, a feeling that urinating "can't wait", a weak flow of urine, needing to stop and start urinating several times, trouble starting to urinate, needing to push or strain to urinate, "frequency" of urination, and getting up to urinate more than 1-2 times a night.



How does your doctor know if you have BPH?

Your doctor can diagnose BPH based on your symptoms and a physical exam in most cases. Sometimes further evaluation is needed such as PSA blood tests, post-void residual urine, ultrasound of the prostate, cystoscopy, urodynamics or UroCuff testing, CT scans or MRI scans

The American Urological Association (AUA) has built a BPH Symptom Score Index. It's a series of questions about how often you have certain urinary symptoms. The Symptom Score helps quantitate the amount of symptoms you have.

Why should I treat BPH?

In most men, BPH gets worse with age. Treatment of urinary symptoms lead most men to seek treatment. For mild symptoms men may choose not to treat their symptoms. For men with moderate to severe symptoms treating the BPH can significantly improve quality of life.

For men reluctant to treat their symptoms and who continue to put off treatment, BPH can lead to bladder damage, bladder stones, bladder failure, infection, bleeding, and kidney damage.

What are my treatment options?

There are many options for treating BPH. You and your doctor will decide together which treatment is right for you.

Surveillance

Often, BPH will only require initial evaluation, confirmation of diagnosis, and a watchful approach with no initial treatment. This means that BPH is monitored with regular visits to your physician. A yearly exam is common. If your symptoms get worse, or if new symptoms appear, your doctor may suggest that you begin active treatment.

Medication

For men with moderate to severe symptoms the most common next step is a trial of medication.

“Alpha blockers” relax the muscles of the prostate and bladder. They improve urine flow, reduce blockage of the urethra and reduce BPH symptoms. They do not reduce the size of the prostate. Men with moderate to severe BPH and men who are bothered by their symptoms are good candidates. These prescription drugs are pills taken by mouth. Alpha-blocking drugs include alfuzosin, doxazosin, silodosin, tamsulosin and terazosin.

Side effects may include dizziness, lightheadedness, fatigue and trouble ejaculating. One benefit of alpha blockers is they start to work right away.

“5-alpha reductase inhibitors” block the production of DHT, a male hormone that can build up in the prostate and may cause prostate growth. They shrink the prostate to increase urine flow and reduce the risk of BPH complications. These prescription drugs are pills taken by mouth and include dutasteride and finasteride. They may take many months to become fully effective.

Side effects include erectile dysfunction and reduced libido (sex drive). You must keep taking the pills to prevent symptoms from coming back.

The two medications can be taken at the same time, an alpha blocker and a 5-alpha reductase inhibitor used together. Men with larger prostates are good candidates for this treatment.

Antimuscarinics work for patients with overactive bladder symptoms. Overactive bladder is when the bladder muscles squeeze uncontrollably. It leads to the frequent and urgent need to pass urine. It can lead to incontinence (leaking). Antimuscarinics relax the bladder muscles.

Phytotherapies are herbal treatments. Men buy them over the counter as dietary supplements. One popular herb is Saw Palmetto. The herbal therapies do not work as consistently as prescription strength medication. There are many brands available.

Surgery

Minimally invasive or less invasive surgeries require only tiny cuts or no cuts to the body. Good candidates include men who have taken BPH medication that did not work and the prostate is felt to be an moderately enlarged prostate. They can often be done as an outpatient, without a stay in the hospital. Recovery time is usually quicker. They can offer relief from symptoms, including urine control problems. On the other hand, they do not reduce your risk for another surgery.

Options for minimally invasive treatments include Urolift, ReZum, and Prostatic Artery Embolization.

More invasive treatments require anesthesia and possibly an overnight stay in the hospital. Although these treatments are more invasive initially, they do provide better long-term relief of obstruction by removing more tissue.

Example of more invasive procedures include a transurethral resection of prostate (TURP), Laser vaporization (TUEVP), Holmium Laser Enucleation (HoLEP), Aquablation, Robotic "Simple" Prostatectomy.

Choosing the right type of surgery for you depends on the size and anatomy of your prostate, your overall health, and your personal choice.

I have chosen to cover BPH procedures in another PDF.

I hope you have found this helpful. Good luck on your journey.

Dr. Brandt