



BENIGN PROSTATIC HYPERPLASIA (BPH) TREATMENT & EDUCATION

Thank you for trusting the Michigan Institute of Urology with your health care. We are Michigan's largest independent urology practice. What does it mean to be independent? It means that we, your healthcare providers, own our practice. We enjoy a greater level of autonomy to spend time with you, build relationships, and provide treatments we believe are the best for your health at the most affordable cost. Our doctors come from some of the country's most sophisticated university research centers, and we offer the most up-to-date, state-of-the-art urological treatments. We are confident we can help you.

WHAT IS BPH?

Benign prostatic hyperplasia, more commonly known as BPH, is an enlargement of the prostate gland. It commonly occurs as men age and can contribute to bothersome lower urinary tract symptoms (LUTS). BPH is very common.

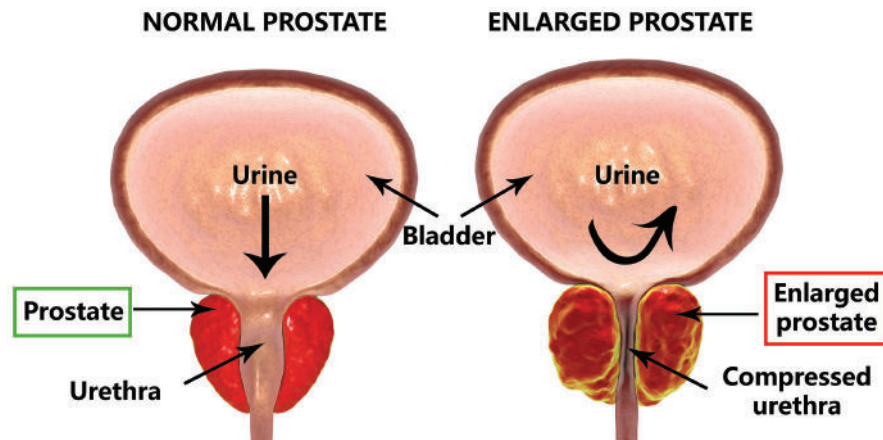
In fact, it is one of the leading reasons men visit a urologist.

The prostate gland grows throughout a man's adult life and, as it enlarges, it can compress the urethra (urine tube) making it more difficult to urinate.

This compression of the urethra can cause bothersome urinary symptoms and, if left untreated, potential damage to the bladder muscle. BPH is not cancer; patients can have BPH and prostate cancer at the same time.

50%
of US men
between the
ages of 51 & 60
are affected by
BPH.

BENIGN PROSTATIC HYPERPLASIA



UNDERSTANDING THE IMPORTANCE OF YOUR PROSTATE

The prostate is part of the male reproductive system. It is about the size and shape of a walnut and weighs about an ounce. This gland is found below the bladder and in front of the rectum. It goes all the way around the urethra, which carries urine from the bladder out through the penis.

The prostate's main job is to make fluid for semen. During ejaculation, sperm made in the testicles moves to the urethra. At the same time, fluid from the prostate and the seminal vesicles also moves into the urethra. The mixture (semen) goes through the urethra and out through the penis.

Your prostate can become larger as you age. Prostate growth begins around the age of 40-50 and is a normal part of aging. Eventually this growth leads to BPH.



SIGNS AND SYMPTOMS OF BPH?

While BPH is a benign condition, the bothersome urinary symptoms associated with BPH can greatly affect your quality of life. You have taken a big step in coming in for an evaluation today and we are ready to help!

You are likely experiencing one or more of the following symptoms:

- Frequent need to urinate both day and night
- Weak or slow urinary stream
- Sense that you cannot completely empty your bladder
- Difficulty or delay in starting urination
- Urgent feeling of needing to urinate
- A urinary stream that stops and starts

These symptoms are called lower urinary tract symptoms, or LUTS, and can be easily assessed with a simple questionnaire called the International Prostate Symptom Score (IPSS). You complete this questionnaire at the time of your visit and it takes just five minutes to identify the severity of your bothersome urinary symptoms.



SYMPTOMS THAT REQUIRE IMMEDIATE MEDICAL ATTENTION

Call your urologist immediately if you have blood in your urine, pain or burning during urination or you are unable to urinate. These symptoms could indicate a more serious condition that requires immediate medical attention.

BLADDER DISEASE PROGRESSION

Earlier interventional treatments that address the obstruction may help preserve bladder health and improve your quality of life. Our providers will perform simple baseline tests to determine the severity of your symptoms and help you understand your options as you walk together through your BPH Care Plan.

Potential risks associated with untreated BPH could include bladder retention (inability to urinate) and irreversible bladder damage. Changes to the bladder due to an enlarged prostate can lead to the need for a permanent bladder catheter.

Up to
90%
of men over the age
of 80 have BPH

BENIGN PROSTATIC HYPERPLASIA DIAGNOSIS



HOW IS BPH DIAGNOSED?

If BPH is suspected, simple tests performed during your initial evaluation will help your doctor diagnose the severity of your bothersome urinary symptoms and put you on a pathway to wellness. Tests will vary from patient to patient, but the most common tests include:

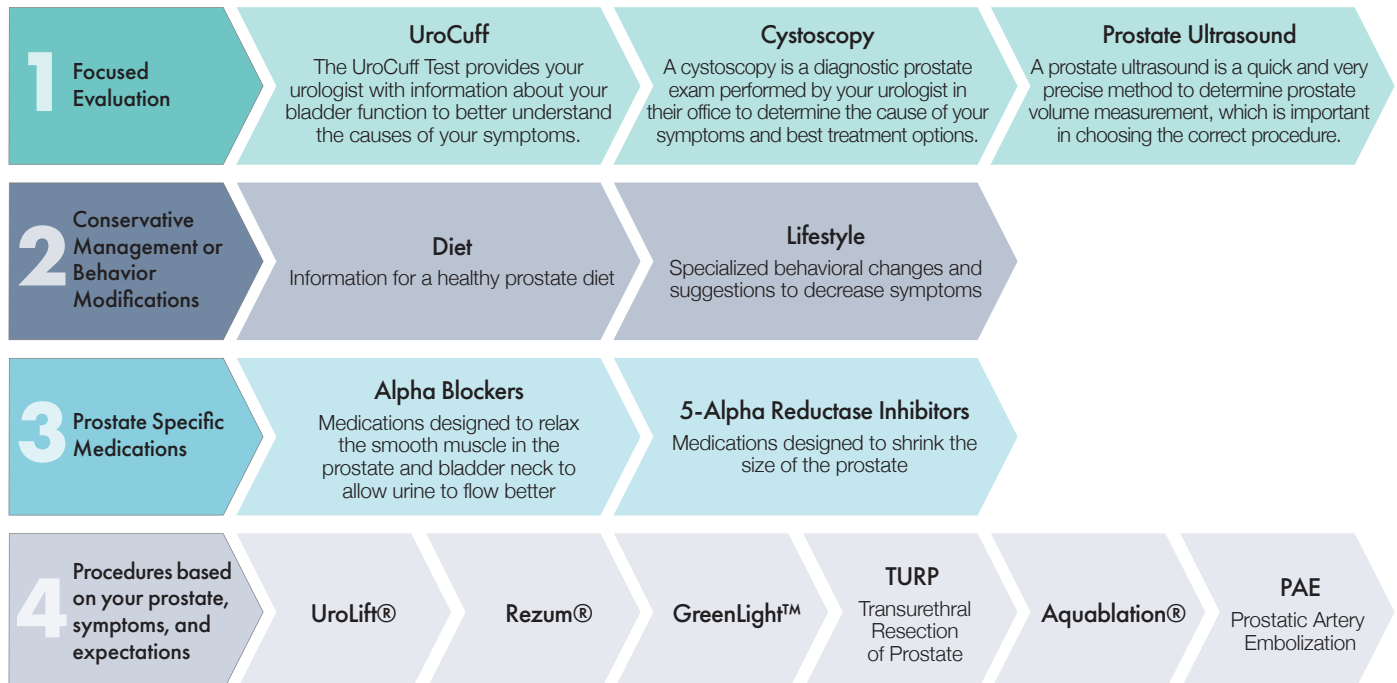
- Personal/family medical history
- Physical examination
- International Prostate Symptom Score (IPSS)
- Urinalysis or “urine test”
- Post-void residual (PVR)
- PSA: if indicated

Additional diagnostic studies may be performed to evaluate your bladder health and disease progression.

BPH PATHWAY

Michigan Institute of Urology provides expert care in BPH. Our board-certified urologists will take the time to work with you to customize a treatment plan that meets your expectations and improves your quality of life.

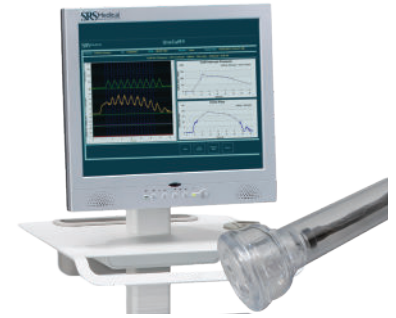
You don't have to live with BPH.



1 FOCUSED EVALUATION

UROCUFF

The UroCuff Test provides your urologist with information about your bladder function to better understand the causes of your symptoms. The UroCuff is a non-invasive diagnostic test for male urinary disorders (LUTS). This test allows your urologist to collect important data about your bladder function while you urinate and can provide better answers about your symptoms. You will be reassessed periodically to measure changes in bladder function and the effectiveness of your treatment plan.



Preparation for this test involves drinking 32 oz. of liquid, which you will finish drinking one (1) hour before testing. Do not urinate until testing is complete.

CYSTOSCOPY

A cystoscopy is a diagnostic prostate exam performed by your urologist in their office to determine the cause of your symptoms and the best treatment options. This brief procedure typically takes about 5 minutes. Cystoscopy enables your urologist to view your anatomy to assess bladder health, confirm the diagnosis of an enlarged prostate, assess which BPH procedure may be most appropriate for you, and rule out other bladder conditions.

PROSTATE ULTRASOUND

A prostate ultrasound is a quick and very precise method to determine prostate volume measurement, which is important in choosing the correct procedure.

Preparation for this test involves self-administering a plain saline enema (4.5 fluid ounces) two (2) hours before testing and drinking 16 oz. of water, which you should finish drinking one (1) hour before testing. Please don't eat after the enema. Do not urinate until testing is complete.

2 CONSERVATIVE MANAGEMENT OR BEHAVIOR MODIFICATION

- Limit beverages in the evening
- Limit caffeine and alcohol consumption
- Follow a healthy diet and stay active
- Avoid bladder irritating foods like citrus fruits, spicy foods, tomato-based products, and chocolate
- Change your bathroom habits: relax while urinating, after urinating, try again 15-20 min. later to empty bladder more completely
- Avoid medications that can impact urination, including some over-the-counter antihistamines and decongestants.



3 MEDICATIONS

ALPHA BLOCKERS

Medications designed to relax the smooth muscle in the prostate and bladder neck to allow urine to flow better. Common side effects can include: dizziness, fainting, headaches, lightheadedness and low blood pressure. They may also lead to retrograde ejaculation. This is when sperm go backwards into your bladder instead of out through your penis during orgasm. It is not harmful, but it means you will ejaculate very little or no semen.

5 ALPHA-REDUCTASE INHIBITORS

Medications designed to shrink the size of the prostate. These can take up to 6 months for maximum effect and may be prescribed in conjunction with an alpha blocker. Common side effects can include: erectile dysfunction, lower sex drive and retrograde ejaculation.

4 OFFICE BASED PROCEDURES

UROLIFT® SYSTEM

The UroLift System is a minimally invasive procedure to treat an enlarged prostate. It is a proven option for patients looking for an alternative to medications or major surgery. It is the only procedural approach to treating an enlarged prostate that does not require any cutting, heating or destruction of the prostate tissue with preservation of sexual function.

The logo for UROLIFT, featuring the word "UROLIFT" in a bold, sans-serif font. The letter "O" is stylized as a yellow ring.

The UroLift System uses a revolutionary approach to treating BPH that lifts and holds the enlarged prostate tissue so it no longer blocks the urethra. The UroLift System has been proven safe and effective and provides rapid relief of your troublesome urinary symptoms.

REZUM®

Rezūm Water Vapor Therapy is a non-surgical treatment that uses the natural energy stored in water vapor, or steam, to remove excess prostate tissue that is pressing on the urethra. During each 9-second treatment, sterile water vapor is released throughout the targeted prostate tissue. Your doctor will determine the number of treatments you need based on the size of your prostate. Over time, your body's natural healing response absorbs the treated tissue, shrinking the prostate. Some patients begin to experience symptom relief in as soon as two weeks, with maximum benefit seen after three months.

The logo for rezūm, featuring the word "rezūm" in a lowercase, blue, sans-serif font with a tilde over the "u".



4 OUTPATIENT SURGICAL OPTIONS

There are also several outpatient surgical options used for the treatment of BPH that are all performed endoscopically, with no incisions and minimal blood loss. During all these procedures, a scope is placed into the urethra, the prostate is visualized directly, and the enlarged prostate tissue is treated to open the channel.

GREENLIGHT™ LASER THERAPY

One of these procedures is a photoselective vaporization of the prostate, also known as the GreenLight Laser Therapy. Our board-certified urologists have extensive experience with GreenLight laser vaporization of the prostate, which is a minimally invasive option for patients with larger prostates.



OPTILUME® BPH CATHETER SYSTEM

Optilume BPH is a drug-coated balloon inserted into the urethra to the prostate via a telescopic camera. The balloon expands and creates an opening to release the safe and proven drug, paclitaxel, into the prostate. When the drug is fully released, the balloon is deflated and removed. The applied drug prevents re-fusion of the lobes during healing, keeping the prostate open, restoring the flow of urine, and relieving symptoms.

TURP

Another procedure in this manner is a bipolar transurethral resection of the prostate, or TURP, in which bipolar energy is used to resect overgrown prostate tissue. Again, our board-certified urologists have years of success with this treatment.

Finding the best BPH treatment for each patient, based on their diagnosis, comfort levels and needs, not only separates Michigan Institute of Urology from others, but we also provide a more effective manner in which a patient's BPH can be treated so it no longer becomes an issue.

PROSTATE ARTERY EMBOLIZATION (PAE)



Interventional Radiology is a medical specialty focused on minimally invasive healthcare treatments. MIU has partnered with renowned physician Dr. Scott Schwartz to open the new IR Centers at MIU. Prostate



Artery Embolization (PAE) is a recommended treatment for men suffering from an enlarged prostate who are not candidates for traditional surgical options.

PAE is a minimally invasive procedure in which the interventional radiologist guides a microcatheter into the blood vessels supplying the prostate. Microscopic beads are injected into the blood vessels feeding the prostate, blocking blood flow to the prostate gland. This causes the prostate to shrink, soften, and absorb over time. This procedure requires no surgical incision and no insertion of a device into the urethra, and there have been no reports of impotence or incontinence following the procedure.

4 SURGICAL OPTIONS FOR VERY LARGE PROSTATES

AQUABLATION®

Aquablation therapy is a resective procedure, meaning that the prostate tissue causing symptoms is removed. No incision is made, as the prostate is reached through the urethra. It can be performed on prostates of any size and shape and is the only procedure that combines a camera (called a cystoscope) with ultrasound imaging, giving the surgeon the ability to see the entire prostate in real-time.



OPEN SIMPLE PROSTATECTOMY

Simple prostate removal, or prostatectomy, is a procedure to remove the inside part of the prostate gland to treat an enlarged prostate. It is done through a surgical incision and generally requires a 2-4 day hospital stay, 6-8 weeks recovery.

SINGLE PORT ROBOTIC PROSTATECTOMY

This is enucleation (keeping the capsule intact) of the prostate. It is done through a single incision approximately 1 ½ inches long below the belt line and accessing the prostate directly through the bladder. This is a safer technique with less pain postoperatively due to not having to use more than one incision and not going through the abdominal cavity. The entire procedure usually takes around 90 minutes plus time for anesthesia. Patients are sent home the same day with a Foley catheter for 10-14 days. This is the only procedure that can remove 90% or more of the prostatic tissue blocking the bladder for prostate glands larger than 120cc in volume.

BPH NAVIGATORS: A STEP BEYOND ROUTINE CARE

There are many ways to treat BPH. Sometimes, making decisions can feel overwhelming and confusing.

Our BPH patient navigators are here to help you throughout your treatment process and make the journey easier by:

- Helping you understand your diagnosis
- Coordinating communication between you and your provider in between office visits
- Facilitating scheduling treatments
- Evaluating your response to therapy



**MAKE AN
APPOINTMENT**

For more information or to make an appointment online, scan this QR code with your phone.



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