



*Frequent urination?
Difficulty starting or
stopping urinating?*

**You may have an
enlarged prostate.**



NORTH STAR
PROSTATE CENTER

An effective, non-surgical treatment for BPH

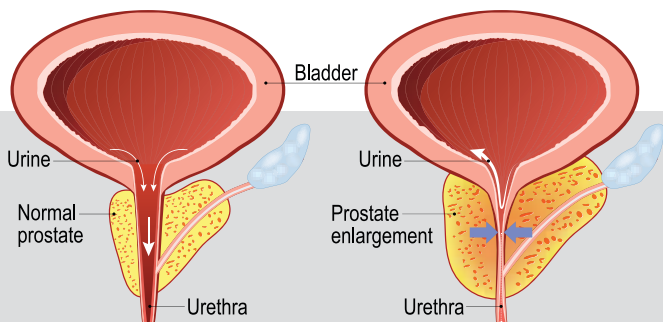
Enlarged prostate is common as men age. The condition—called benign prostatic hyperplasia (BPH)—is non-cancerous and affects half of all men between 51 and 60 years of age and up to 90% of men older than 80. About 14 million American men have BPH.

The prostate gland is located next to your bladder. As it grows, it pushes against the urethra and can block urine flow. Most men with BPH are unhappy with the condition and do not wish to live the rest of their lives with its symptoms, which typically include:

- A frequent or urgent need to urinate (especially at night)
- A weak urine stream
- Difficulty beginning urination or dribbling at the end
- Inability to completely empty the bladder

BPH is also linked to erectile dysfunction and reduced sex drive. Left untreated, it can lead to urinary tract infections (UTIs), bladder damage, bladder stones, kidney damage (or chronic renal failure) and urinary retention (the inability to urinate).

Benign Prostatic Hyperplasia



Is PAE right for me?

Prostate artery embolization is recommended for patients who:

- Have an enlarged prostate (greater than 50 grams)
- Have not been able to control their BPH symptoms with medication
- Have refractory hematuria
- Do not wish to have surgery
- High-risk surgical candidates
- Are on anticoagulation medications
- Smoke cigarettes

PAE is a less invasive option to treat BPH. If you have been diagnosed with BPH or enlarged prostate, call us to schedule a consultation. We are happy to work with your doctor, and if they are unfamiliar with PAE, we can share information about the procedure and its safety record with them.





Treatment options

Men with mild BPH symptoms may be treated with lifestyle changes, medication or supplements. Your doctor may also ask you to avoid taking certain medications like decongestants or certain antihistamines that can affect your prostate.

Severe BPH symptoms may be treated with transurethral resection of the prostate (TURP), a surgical procedure that requires anesthesia. Unfortunately, side effects are common with TURP procedures and include infection, sexual dysfunction and retrograde ejaculation.

A new and minimally invasive procedure cleared by the FDA in 2018, known as prostate artery embolization (PAE), is an excellent treatment option for men with severe BPH symptoms. This convenient outpatient procedure may alleviate BPH symptoms for most men without the need for surgery.

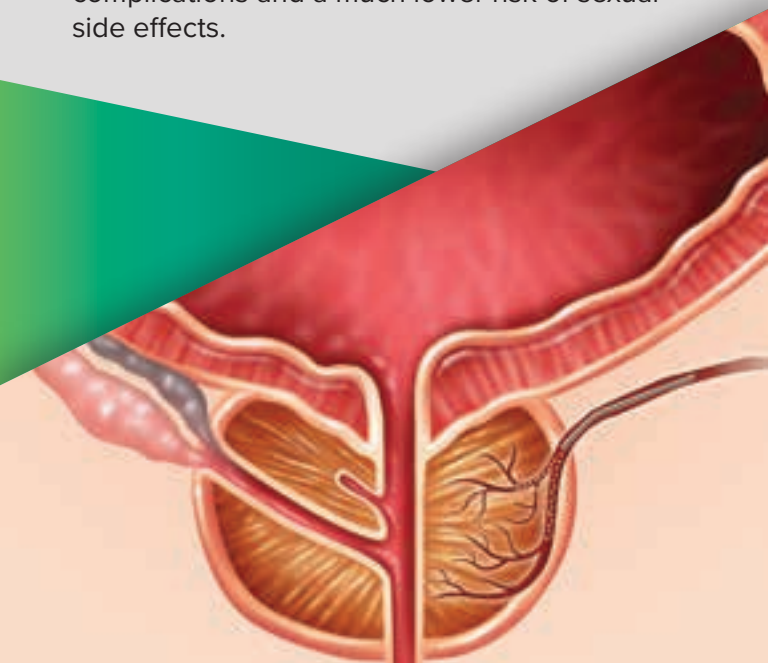
WHAT HAPPENS AS THE PROSTATE

The prostate is a gland that is normally the size of a walnut. The enlarging prostate can put pressure on the urethra, the flow of urine or, in extreme cases, cut it off completely.

The PAE procedure

Prostate artery embolization is performed by an interventional radiologist who, using imaging guidance, inserts a tiny catheter into an artery in the patient's upper thigh or wrist, and then guides it through the body's blood vessels to the arteries supplying blood to the prostate. Tiny beads called 'microspheres' are released through the catheter and into the arteries, partially blocking blood flow to the prostate. With reduced blood flow, the prostate shrinks and symptoms are relieved.

Unlike TURP, PAE is an outpatient procedure that requires no anesthesia. It has a high success rate (75-95%), a faster recovery, fewer complications and a much lower risk of sexual side effects.



GETS BIGGER?

alnut. With BPH, it can grow as large as a tennis ball. which carries urine out of the body. This can restrict tely.

North Star Vascular & Interventional

The doctors at NSVI are pioneers in interventional radiology. In fact, Dr. Golzarian of NSVI was the very first doctor in the United States to perform the PAE procedure. We have performed more than 500 PAE procedures, consistently achieving a higher success rate than the national average. We have even performed the procedure successfully for patients who previously had an unsuccessful PAE procedure elsewhere.

Dr. Golzarian's influence extends globally, and he travels the world teaching his PAE technique to aspiring interventional radiologists. This dedication to advancing the field and delivering exceptional outcomes makes us the trusted choice for patients seeking the best in PAE treatment. To learn more, visit NorthStarIR.com.



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