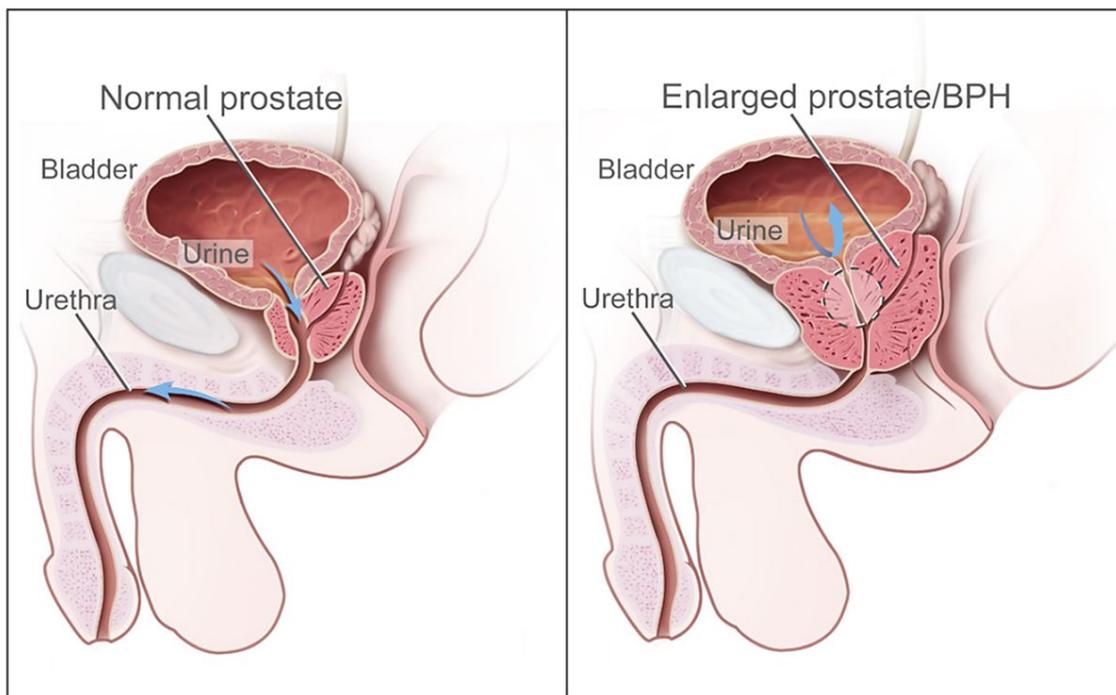


Holmium Laser Enucleation of the Prostate (HoLEP)

What is holmium laser enucleation of the prostate (HoLEP)?

Holmium laser enucleation of the prostate (HoLEP) is a procedure to remove extra prostate tissue from an enlarged prostate (known as **benign prostatic hyperplasia, or BPH**).

The **prostate** is a gland that is part of the sex organs, which also include the penis, scrotum, and testicles. The prostate makes fluid that goes into **semen**, which is a mix of sperm and prostate fluid.



Why does an enlarged prostate cause issues?

As the prostate enlarges, the gland presses against and pinches the **urethra** (your urinary canal that urine, or pee, passes through to go out of your body). The bladder wall becomes thicker. Eventually, your bladder may weaken and

lose the ability to empty completely, leaving some urine in the bladder. This can cause many problems such as blood in your urine, kidney damage, and bladder stones.

How is the HoLEP procedure done?

1. First, you will be put under **general anesthesia** (drugs used to decrease pain and put you to sleep).
2. Then, your surgeon will put a **telescope** (a thin, lighted tube) through the urethra in your penis and move it toward your prostate.
3. Your surgeon will push a laser called a **holmium laser** through the telescope to remove (**enucleate**) the prostate gland tissue that is blocking your urine flow. They will leave the other prostate tissue on the sides in place.
4. Your surgeon will push the removed prostate gland tissue into your bladder. Then they will use a device called a **morcellator** to grind up and remove the tissue.

What steps should I take to prepare for the HoLEP procedure?

- **Do not eat any solid food** (including gum, hard candy, or mints) after 12 AM (midnight) the night before your surgery.
- **Do not drink any milk products** after 12 AM (midnight). **You may only drink water** and take any routine medications up to 4 hours before your surgery.
- Wear loose, simple clothing which can easily be changed. Leave all jewelry and valuables at home.
- **Bring a responsible adult (18 years or older) to the hospital with you.** They must stay in the hospital and be available to hospital staff during your procedure. Hospital staff may need to ask them questions and give them an update after your procedure is done. They should also help you

after your procedure by driving you home and making sure you're doing okay.

What should I expect before my HoLEP procedure?

Tests

You will have lab tests, a urine test, and possibly EKG and x-rays done to ensure your health and safety before the procedure.

Medications

- You will need to stop taking all blood thinner medications **1 week before** your surgery and **1 week after** your surgery. This includes:
 - Plavix®
 - Coumadin®
 - NSAIDs (non-steroidal anti-inflammatory drugs)
 - Nutritional or herbal supplements
 - Any other blood thinners or antiplatelet medications (like Eliquis®, Xarelto®, and Brilinta®)
- In some cases, you may be able to continue taking aspirin, aspirin-like medications, and NSAIDs based on your medical history.
- Please take Tylenol® (acetaminophen) if you need pain relief during this time.
- **We will contact your doctor who prescribes your blood thinners** to make sure that it is safe for you to be off them during this time. We will let you know if you should stay on any blood thinners.
- **Important:** If you start any new medications or get sick before surgery, please call our Urology clinic as soon as possible to talk about whether you can continue taking your medication before the day of your surgery.
- Your doctor will prescribe **antibiotics** (medications that help prevent infections) that you will need to start taking after your surgery. In some

cases where your risk for infection is higher, your surgeon may start your antibiotics during the week before your surgery date.

What should I expect on the day of my HoLEP procedure?

- One of our nurses will call you the day before your procedure to let you know what time to arrive at the Surgery Center. When you get to the Surgery Center, you will check in at the Surgery registration desk.
- One of our team members will help you and bring you to the pre-operative (“pre-op”) area.
- The anesthesia team will put monitoring devices on you to check your heart and oxygen levels. In almost all cases, you will be placed under general anesthesia and you will be asleep during your procedure.
- We will take you to the Operating Room area where you will have your procedure.

During the procedure

- After you are asleep, the surgery team will very carefully lay you down on your back, with your legs raised.
- The surgeon will then do the HoLEP procedure (described on page 1).
- How long your surgery will take depends on the size of your prostate and how complex your case is. The procedure can last for several hours.

What should I expect after surgery?

- You will stay overnight for 1 night in the hospital with a Foley catheter. A **Foley catheter** is a tube that goes through your urethra and into your bladder to drain urine. This is usually removed before you leave the hospital.
- In some cases, you may be able to go home on the same day of your surgery with a Foley catheter. If so, you will have an appointment for the Foley catheter removal in the doctor’s office a few days later.

- After 4-8 weeks, you will have a post-operative check-up.

Medications

- It is very common to have a stinging or burning feeling when urinating after surgery. We will give you a prescription for a medication called Pyridium® to reduce these symptoms. **Please continue to take Pyridium® for 7 days after your surgery.** This medication will turn your urine orange, and it can stain your clothes.
- You may need to take antibiotics after your surgery. **Please continue to take your antibiotics until your prescription is gone.**
- Ask your surgeon about taking anti-inflammatory products (NSAIDs, ibuprofen, and naproxen, such as Advil®, Aleve®, and Motrin®) after surgery. They may instruct you not to take these medications **for at least 2 weeks** after your surgery.
- If you are on blood thinners, a doctor or nurse will tell you when to start taking them again. This will be based on your doctor's recommendation (your cardiologist or other specialist).
- We will prescribe a stool softener (Colace®) to help you avoid constipation, as straining while pooping can increase your risk of bleeding after surgery.

For the first 24 hours after surgery:

- Do not drive any motor vehicle (car, truck, etc.) or operate motorized equipment (like power tools or lawn equipment) for at least 48 hours after your procedure.
- Do not make any major decisions, sign legal documents, or participate in activities that could harm others (such as cooking, or nursing infants) without someone watching you or helping you for at least 24 hours after your procedure.
- Do not drink alcohol for at least 24 hours after your procedure.

Symptoms

- You may have a sense of urgency (feeling a strong and sudden need to pee) when urinating. Some patients will leak urine before they're able to reach the bathroom. This leakage can last up to 3 months after surgery.
- You can expect to see blood in your urine for 4 weeks after your surgery. This blood is usually at the beginning or end of the urine stream, and it can come and go. Drink a lot of water in the 4 weeks after surgery to keep yourself well hydrated. This will help you urinate often to prevent blood from forming a clot (lump) in the bladder.
- For 2 weeks after surgery, you may notice bits of tissue or scabs in your urine. This is healing tissue from your prostate. You may notice an increase in the amount of blood in your urine and a burning or stinging feeling while urinating at this time. This should go away in a few days as the prostate heals. Remember to continue to drink 2 liters per day unless you have kidney damage or congestive heart failure.

Food and drink

- Drink more fluids if you have blood in your urine. Drink 2 liters (64 fluid ounces) per day unless you have kidney damage or congestive heart failure.
- Start slowly with eating after your procedure. Start with sips of liquids, then add solid food as your body tolerates it. If you do not feel like eating solids, drink liquids. Nausea and vomiting are common after your surgery, and these symptoms are not considered abnormal unless they are severe or they continue past the first day after your surgery.

Physical activity:

- You can start doing normal physical activity (walking, climbing stairs, driving, etc.) after your surgery. **Avoid strenuous activities (anything**

that increases your heart rate), aerobic exercise (like distance walking or swimming), golfing, or long periods of travel for 4 weeks.

- **Do not engage in any straddle activity (where you are sitting on something with your legs spread apart) for 4 weeks.** This includes biking, riding a lawnmower, motorcycling, snowmobiling, etc. If you notice that your urine becomes bloody when you start doing more strenuous physical activities, stop that activity and take things more slowly.
- You can start sexual activity after 4 weeks. Your first several ejaculations may be uncomfortable. **Retrograde ejaculation** (having little or no semen come out during orgasm) is common.

When should I call for help?

Call the clinic if you have any of the following signs and symptoms:

- You're not able to urinate (pee)
 - If you are not able to reach a nurse or doctor within 1 hour, then **go to the emergency room.**
- Fever of more than 101.5 ° Fahrenheit, along with sweats and chills
- Bright red blood in your urine and large clots that make it hard to urinate
- Severe pain that continues and is not helped with pain medications
- Leg pain or swelling

What is the contact information for the Urology clinic?

- **During business hours** between 8:00 AM - 5:00 PM Monday through Friday: call (734) 936-7030
- **After 5:00 PM or on weekends:** contact the on call urologist at (734) 936-6267

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