Holmium Laser Enucleation of the Prostate

**What is Holmium Laser Enucleation of the Prostate?**

Holmium laser enucleation of the prostate (HoLEP) is a procedure to remove extra prostate tissue due to enlarged prostate (Benign Prostatic Hyperplasia).

The prostate is a gland that is part of a man’s 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.

![Diagram showing normal and enlarged prostate](image)

**Why does an enlarged prostate cause issues?**

As the prostate enlarges, the gland presses against and pinches the urethra. The bladder wall becomes thicker. Eventually, the bladder may weaken and lose the ability to empty completely, leaving some urine in the bladder. This can cause many complications such as blood in the urine, kidney damage and bladder stones.
How is the procedure done?

1. With the patient under general anesthesia (drugs used to decrease pain and put you to sleep), the surgeon approaches the prostate with a telescope through urinary canal (urethra) in the penis. A telescope is a thin lighted tube.
2. The surgeon pushes a laser called **a Holmium Laser** through the telescope to remove (enucleate) the prostate gland tissue that is blocking urine flow leaving just the prostate tissue on the sides in place.
3. The surgeon pushes the removed prostate gland tissue into the bladder and then uses a device called a Morcellator to grind up and remove the tissue.

What should I expect before my surgery?

Tests

You will have lab tests, urine culture, possible EKG and X-rays done to ensure your safety before the procedure.

What steps should I take to prepare for the procedure?

1. **Do not eat any solid food** (including gum, hard candy or mints) after 12am (midnight) the night before surgery.
2. **Do not drink any milk products** after 12am (midnight). **You may only drink water** and take any routine medications up to 4 hours before your surgery.
3. Wear loose, simple clothing which can easily be changed. Leave all jewelry and valuables at home.
4. **Bring a responsible adult companion to the hospital who will:** remain in the hospital, be available to hospital personnel during your procedure, and assist you upon discharge by driving you home with close observation of your condition.
Medications
- You will need to stop taking all blood thinners **one week before** your surgery and **one week after** your surgery. This includes:
  - Plavix®
  - Coumadin®
  - Aspirin
  - NSAIDS (Non-Steroidal Anti-Inflammatory drugs)
  - Nutritional or Herbal Supplements
- Please take Tylenol® (acetaminophen) if you need pain relief during this time.
- **We will contact your doctor who prescribes these drugs** to verify 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 before surgery, please contact our office as soon as possible to discuss whether or not the medication may be taken up to, and the day of the surgery.

Antibiotics
- You will be prescribed antibiotics that you will need to start taking **one week** prior to your surgery date unless otherwise specified.

**What should I expect on the day of my surgery?**
1. Arrive at the Surgery Center and report to the Surgery Registration desk at the time requested. Please allow for time to register and change your clothing.
2. One of our team members will assist you and escort you to the designated area.
3. The anesthesia team will attach monitoring devices to you. In almost all cases, you will be placed under general anesthesia and will be asleep during the procedure.
4. We will take you to the Operating Room Suite, where the entire procedure will be performed.
During the procedure

• After you are asleep, the surgical team places you very carefully on your back with legs elevated.
• The surgeon will do the procedure as described on page 1.
• The duration of the surgery depends on the size of your prostate and the complexity of your case, which can last for several hours.

What should I expect after surgery?

• You will stay overnight in the hospital with a Foley catheter for one night. A Foley catheter is a tube that is passed through the urethra and into the bladder to drain urine. This is typically removed before discharge.

Medications:

• It is very common to experience a “stinging” “burning” sensation when urinating after surgery. You will receive a prescription called Pyridium® to reduce these symptoms. Please continue to take Pyridium® for 7 days after surgery. This will turn your urine orange and can stain your clothes.
• You may need to take antibiotics after surgery. Please continue this until your prescription is gone.
• Do not take any anti-inflammatory products for at least 2 weeks following surgery.
• If you are on blood thinners a doctor or nurse will instruct you when to resume taking them based on the recommendation of your doctor (cardiologist or specialist).

For the first 24 hours:

• Do not drive any motor vehicle or operated motorized equipment for at least 24 hours after your procedure or while taking narcotics.
• Do not make any complex decisions, sign legal documents, or participate in activities potentially harmful to others, such as cooking or nursing infants, without supervision for at least 24 hours after your procedure.
• Do not drink alcohol for at least 24 hours after the procedure.
Diet:
- Increase your fluid intake to 2.5-3 liters per day.
- Begin your food intake slowly. Start with sips of liquids, followed by the addition of solid food as tolerated. If you do not feel like eating solids, take liquids. Nausea and vomiting commonly occur during this period and is not considered abnormal unless severe or persistent beyond the first day.

Symptoms:
- It is not uncommon to have a sense of urgency when urinating. Some patients will leak urine before being able to reach the bathroom. This leakage can be bothersome and 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 frequently to avoid blood forming a clot in the bladder.

- 7-10 days following surgery you may notice flecks of tissue or “scabs” in your urine. This is the passage of the healing tissue in the prostate: you may notice an increase in the amount of blood in your urine and an irritation while urinating at this time. This should resolve in a few days as the prostate heals. Remember to continue to increase your fluid intake to 2.5-3 liters per day.
Physical Activity:
- You can resume normal physical activity (walking, flights of stairs, driving, etc.) after surgery. **Avoid aerobic activity for 2 weeks. Do not engage in any straddle activity for 4 weeks.** This includes biking, lawn mowing, motorcycle, snowmobiling etc. If you notice that when you resume more strenuous physical activity, your urine becomes bloody, stop that activity and take things more slowly.
- After 8 weeks you will have a post-operative check-up.

When should I call for help?
Call the clinic if you have the following signs and symptoms:
- Inability to urinate.
  - If you are not able to reach a nurse or doctor within 60 minutes, then **go to the emergency room.**
- Fever of more than 101.5 Fahrenheit along with sweats and chills.
- Bright red blood in urine and large clots that make it difficult to urinate.
- Severe pain that continues and is not relieved with pain medications, or leg pain.

What is the contact information for the clinic?
- **During business hours** between 8 a.m.-5p.m. Monday through Friday call (734) 936-7030
- **After 5 p.m. or on weekends** contact the On Call Urologist at (734) 936-6267