Green Light Laser Therapy for Treating Benign Prostatic Hyperplasia (BPH)

To learn about this procedure it helps to know these words:

The **prostate** is the sexual gland that makes a fluid which helps sperm move. It surrounds the urethra at the neck of the bladder.

The **urethra** is a tube that takes urine and sperm out of your body.

The **bladder** stores urine made by the kidneys.

**Urinate** means to move urine from your bladder. This may also be called passing urine, passing water, voiding or peeing.

The picture shows these parts of a man's body.
What is Benign Prostatic Hyperplasia or BPH?

As you become older, the prostate may increase in size. This is a normal part of ageing and is common in men over the age of 50.

Sometimes, the increased size of the prostate blocks the urethra. This makes it hard to start to urinate and empty your bladder completely. This may also cause dribbling at the end of the urine stream.

During a rectal exam, your doctor checks the size of your prostate. Your doctor may then do a cystoscopy to have a better look. A cystoscopy uses a small, lighted tube called a cystoscope to look into the bladder.

A cystoscopy shows if the prostate is blocking the urethra. When the prostate gland is large and presses on the urethra this is called hyperplasia. Benign means that this is not cancer.

What is Green Light Laser Therapy?

With Green Light Laser therapy the surgeon uses a thin laser fiber to vaporize some of the prostate tissue. This opens the urethra and allows urine to flow better.

What happens before the procedure?

Pre-Admission Assessment Unit (PAAU) Appointment – 1 to 2 weeks before surgery

You will come to the Pre-Admission Assessment Unit to learn how to get ready for surgery. Here you will meet with a nurse, pharmacist and anesthetist.

You will have a heart test done called an ECG. You will meet with the anesthesiologist to talk about the type of anesthesia you will have. A general anesthesia means that you are asleep during the procedure. A spinal anesthesia means that you have special medication inserted into a tube in your back so you cannot feel anything from the waist down. The type of anesthesia you have depends on your surgeon.

In the Pre-Admission Assessment Unit you get written instructions to follow before and after surgery. If you are not sure of anything, contact your surgeon’s office for advice.
The Day Surgery Unit (DSU) – Day of the Procedure

You will check in at the Reception Desk at the Day Surgery Unit 2 hours before surgery. You will wait in the waiting room until you are called in. If you have a friend or family member with you, you go into the Day Surgery Unit by yourself at first. As soon as you are ready for surgery, the nurse will invite your support person to join you.

In the Day Surgery Unit, you will get ready for surgery. You will go to the bathroom and then put on a hospital gown. The nurse will ask you some questions and answer your questions.

You will have a small thin tube put into a vein in your arm. This is called an intravenous or IV. The IV is used to give you fluids and medications before, during and after the procedure.

The Green Light Laser Therapy Procedure Room

When it is time, you will be taken to the Green Light Laser Therapy Procedure Room on a stretcher. This room is bright and cool. You will be helped onto the procedure table.

The team then goes through the steps of preparing for your procedure called a “surgical time out.” They make sure they have the right patient and the right procedure before starting. The anesthesiologist then starts your spinal or general anesthesia.

During the procedure, the doctor puts a cystoscope into your urethra to look at your prostate gland. The laser fiber is inserted and prostate tissue blocking the urethra is vaporized. During this procedure a sterile water solution runs constantly through the tubes to keep your bladder and urethra clean.

Before you wake up, the doctor puts a thin tube called a catheter into your penis to drain urine. At the tip of the catheter there is a small balloon. This balloon sits in your bladder and holds the catheter in place. The catheter stays in the bladder for 1 day. It is removed in the surgeon’s office the next day when you come for your follow-up appointment.

The procedure takes about 90 minutes.
While you are in the procedure room and recovery area, your support person can go for a snack or meal and then to the far end of the waiting room closest to the Day Surgery Unit. The surgeon will come to talk to your support person after the procedure when arranged.

**Post Anesthetic Care Unit (PACU)**

**Recovery**

While you are waking up, you are taken by stretcher to the PACU. You will be watched closely by the nurses and given pain control medication if needed. You will stay here until you are fully awake and then go back to the Day Surgery Unit for a short stay. You are discharged home from here in a few hours.

**Catheter and Drainage Bag**

The catheter is attached to a drainage bag. The drainage bag must be kept lower than the level of your bladder. This prevents urine from flowing back into your bladder, which may cause infection. Urine should be the colour of rosé or zinfandel wine as you heal.

The catheter is taken out the next day in your surgeon’s office at your first follow-up appointment.

After your catheter is removed, you may notice:

- a burning feeling when you urinate
- you feel an urgent need to urinate
- some blood in your urine
- some dribbling of urine

These things will improve as you recover. Remember to drink fluids.

You may see small amounts of tissue or blood clots in your urine for up to 8 weeks after surgery.
Pain and Discomfort

Most men do not have much pain but you may feel as if your bladder is full. When the catheter is in, you may feel pressure, spasms, burning or a need to void until it is taken out.

After the catheter is removed you may have frequency and urgency of urine for a few weeks as you heal. The length of time depends on the amount of tissue vaporized. This can last anywhere from 3 to 8 weeks.

You may see small amounts of tissue in your urine. This is normal as the area heals and small scabs fall off. You do not need to call the surgeon. Continue to drink plenty of non-caffeinated fluids to flush the bladder.

Most men do not need pain control medication but you can use plain Tylenol for relief. Do not take use any aspirin products for 1 week after the procedure unless you have been given other instructions.

Nutrition and Fluids

After the IV is taken out, you can follow your normal diet. You need to drink extra fluids. Drink 6 to 8 glasses of water each day. Do not have any drinks or products that that contain caffeine, such as coffee, tea, hot chocolate, cola and chocolate. **If you have heart or kidney problems, check with your surgeon about how much to drink.**

Do not strain to have a bowel movement. Straining may cause bleeding in your bladder. Eating foods high in fibre and drinking fluids can prevent constipation. Foods high in fibre include whole-wheat products, bran, fresh vegetables and fruit. Extra fluids also help.

Activity Guidelines

- Gradually return to your normal activities.
- You can do moderate exercise like walking and stretching.
- If you see blood in your urine stream after an activity or exercise, stop and rest. Drink extra fluids to flush your bladder.
- **Do not do any heavy lifting for 2 to 3 weeks.** Heavy lifting means no more than 10 pounds or 4 kilograms. This weight is like a full bag of groceries, small suitcase or small baby. If your job requires you to do heavy lifting, talk to your surgeon about when you can do this again.
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Activity Guidelines (continued)

- Do not do strenuous exercise like shovelling snow, vacuuming or cutting grass for 3 weeks.
- Ask your doctor about any activities you would like to do.

Driving

You cannot drive for 24 hours after having anesthetic.

Sexual Activity

- Do not have sexual intercourse for 3 to 4 weeks.
- During sexual activity, you will feel as if ejaculation is taking place, but fluid may not come out of your penis. The fluid goes into your bladder instead and will come out the next time you urinate. This is normal and is not harmful.

Follow-up

Make sure you have follow-up appointments to see your surgeon:
- the day after the procedure to have your catheter taken out
- 1 month after the procedure
- 3 to 4 months after the procedure

Contact your surgeon if:

- you have bright red bleeding or clots in your urine that do not clear with drinking fluids
- have abdominal pain

Go to Emergency if:

- If you cannot pass your urine for more than 4 hours