**Introduction:**

Greenlight laser PVP is a surgery used to relieve urinary symptoms caused by an enlarged prostate, a condition known as benign prostatic hyperplasia or BPH.

The urethra travels through the prostate. When the prostate is enlarged, men may experience weak flow, incomplete bladder emptying, urinary frequency, excessive nighttime urination, urinary urgency, and urinary tract infections.

The procedure is done under a general or spinal anesthetic. Your doctor inserts a scope through the urethra and uses a laser to vaporize prostate tissue which is obstructing the flow of urine.

**Benefits of Greenlight PVP:**

Greenlight laser surgery is a recent advancement in the treatment of BPH. It has several advantages over conventional BPH surgery, transurethral resection of prostate, or TURP; Greenlight PVP is typically an outpatient procedure with less bleeding than TURP. Patients are typically discharged with a catheter in the bladder for 24 hours which will be removed by nurses in the community. Men with very large prostates, or who are already unable to urinate as a result of BPH, may require the catheter in for a longer postoperative period.

After a few weeks, the vast majority of men experience an improvement in their urinary flow and ability to hold their bladder longer. The surgery is associated with a reduced risk of urinary tract infections and bladder stone formation. Men can usually stop any prostate or bladder medication they were previously taking. The benefits of the procedure are usually permanent, although a small proportion of men may require the procedure to be repeated in the short or long-term.

**Side effects and potential risks:**

**Most** men will have **permanent** decreased semen volume in the ejaculate, or "dry orgasm". This typically does not affect sexual pleasure but does decrease fertility. You should not have this operation if semen volume or fertility are important to you. Most medical and surgical treatments for BPH, including conventional TURP, are associated with decreased or absent semen.

Patients may experience difficulty urinating after the catheter is removed, which is nearly always temporary. Patients will have blood in the urine for a few days or weeks following the procedure. A rare side effect would be inability to void as a result of a blood clot stuck in the urethra which would require catheter reinsertion and flushing of the bladder.

Many men experience temporary worsening of their urinary symptoms, including burning with urination, frequent urination, and urinary urgency for a few days or weeks following the surgery. Men commonly have blood in their urine for a few days or weeks after surgery. Some men notice passage of small debris/tissue in the urine. It is very rare for any these symptoms to persist for more than a few weeks. Urinary flow rate is usually the first symptom to dramatically improve after the surgery, followed by urinary frequency and urgency.

Rare complications include the formation of scar tissue in the prostate or urethra which would require additional procedures to rectify.

Exceptionally rare complications include permanent urinary incontinence or erectile dysfunction.

**Discharge instructions:**

Men are discharged, usually on the same day, with a catheter in the bladder. Prior to discharge, nurses will ensure you are able to care for the catheter (ie: empty the leg bag when it is full). You will be contacted by community nurses (ie: CCAC, or the LHIN) to remove the catheter. You may be required to travel to one of the CCAC community centres for catheter removal; you should have somebody drive you, as the catheter can be distracting while driving.

You should avoid strenuous activity or heavy lifting for 2-3 weeks. Time off work varies depending on your job, but men can generally resume non-strenuous work after only a week or two. As there are no incisions, patients typically do not experience pain, apart from some burning with urination. Your doctor will prescribe painkillers, but many men find regular ibuprofen or acetaminophen sufficient. You should stay well hydrated in order to dilute your urine and prevent blood clot formation.

If you were instructed to hold blood thinners for the procedure, you can resume these once your urine has been clear for 2 consecutive days. If you are taking medication for BPH (eg: Flomax/Tamsulosin, Rapaflo/Silodosin, Avodart/Dutasteride, Proscar/Finasteride), your doctor will instruct you about whether/when to discontinue.

**Questions?:**

It is important that you are fully informed and have had all your questions answered prior to the procedure. If you have any questions or concerns at any time either before or after the procedure, please discuss with us.