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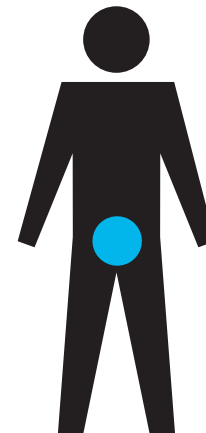
PROSTATE INFORMATION ●

## SPOTLIGHT ON

# Treatment for an enlarged prostate

by

1. **Trans Urethral Resection of Prostate (TURP)**
2. **Green Light Laser (GLL)**
3. **Holmium Laser Enucleation of the Prostate (HoLEP)**



### About your prostate

The prostate starts out about the size of a pea then slowly grows reaching the size of a walnut when the man is in his 20s. Around the age of 40, it starts to grow or enlarge again and this may cause problems for a man when passing urine. Only men have a prostate.

### Where is it?

The prostate is inside the pelvis, just below the bladder and in front of the back passage. It wraps around the tube, called the urethra, which allows urine to flow out of the bladder and semen to pass out through the penis. Therefore, the prostate can't be seen or checked from outside the body.

### What does the prostate do?

It supplies a thick, clear fluid that mixes with sperm to form semen, called the ejaculate. This fluid helps to nourish and protect sperm during intercourse. The prostate also makes Prostate Specific Antigen or PSA which is a protein that makes semen more fluid and so helps sperm move more easily.

This leaflet focuses on 3 different ways of surgically treating your enlarged prostate.

1. **Trans Urethral Resection of the Prostate (TURP)**
2. **Green Light Laser (GLL)**
3. **Holmium Laser Enucleation of the Prostate (HoLEP)**

### Why might a TURP, GLL or HoLEP be done?

First and foremost these are to help with urinary symptoms. There are several reasons why these may be done, for example, for men who have:

- An enlarged prostate (benign prostatic hyperplasia BPH) and the tablets that they were taking for the symptoms associated with BPH are not working so well or have stopped helping;
- Urinary tract infections that keep coming back caused by bladder outflow obstruction;

- Acute or chronic urine retention caused by prostate enlargement;
- Prostate cancer that may be causing urinary symptoms. It is not a treatment for prostate cancer.

### 1. Trans Urethral Resection of the Prostate (TURP)

This is a surgical treatment to help make it easier for you to pass urine if you have an enlarged prostate and it may help relieve your other symptoms. It means that the extra prostate tissue that is making it difficult for you to pass urine is 'trimmed off' but your prostate is not completely removed. You could think of it like coring an apple. At the time of writing, this is probably the most common type of surgery.

### 2. Green Light Laser (GLL)

This is a newer treatment which is associated with a shorter hospital stay and less bleeding. It may be a suitable choice to treat an enlarged prostate and should make it easier to pass urine. At the time of writing, it's not available in all areas but is steadily becoming much more readily available.

### 3. Holmium Laser Enucleation of the Prostate (HoLEP)

Again this is a newer treatment which is associated with a shorter hospital stay and less bleeding. It may be a suitable choice to treat an enlarged prostate and should make it easier to pass urine. At the time of writing, it's not available in all areas but is becoming more readily available.

If you are interested in GLL or HoLEP, please ask your doctor or clinical nurse specialist for more information on if, and how, you could have GLL or HoLEP and if either might be a suitable treatment choice for you.

This guide is to help you understand what each of these treatments involve and potential side-effects. It may be that in your area there is a choice of treatments available ie surgery or laser treatment and you are

faced with the decision of which treatment to go for. This booklet gives an overview of each treatment then at the back of the booklet gives a table comparing the treatments to help you come to a decision.

Although the leaflet has been written for those men having a TURP, if you are having a transurethral incision of the prostate (TUIP) or bladder neck incision then the information in this leaflet is also relevant for you.

### What are the symptoms that show I might need TURP, GLL or HoLEP for an enlarged prostate?



### Before any of the treatments tell the doctor, anaesthetist or nursing staff:

- If you have any problems with bleeding;
- If you have an allergy to any medicines like antibiotics;
- About any medicines, herbal pills or herbal supplements you are taking. It may be helpful to write a list of all the medicines that you take each day;
- If you take any drugs to thin your blood such as warfarin and clopidogrel, as you should be asked to stop these before your TURP, GLL or HoLEP;
- If you take aspirin, ibuprofen or other non-steroidal anti-inflammatory drug.

### What happens during TURP?

*(Please remember that this is general guidance. As there is more than one approach and treatment procedures may vary slightly from hospital to hospital, ask for more advice from staff at the hospital you are attending.)*

During a TURP, a long thin telescope-like instrument is passed into the urethra (water pipe) through the penis. This telescope has a light and an operating insert, called a resectoscope, which has a wire loop. A controlled electric current is applied to the wire to 'trim off' parts of the tissue that are blocking the flow of urine.

To reduce the risk of infection, normally you will be given antibiotics into your vein during your operation and possibly for a few days afterwards.

During the procedure, a dilute solution called glycine is used to wash away any blood and the 'trimmings' or pieces of tissue. The operation lasts up to an hour. After the operation, the bladder is washed out with a salt solution (normal saline) through a catheter. This is to prevent the build-up of blood clots in the bladder whilst the effects of the operation settle down.

### Will I have a wound?

Yes, but as this operation is carried out inside your body through your penis, you will not have a wound on the outside of your body. The inner surface of your prostate will be a little raw and prone to bleeding for a few weeks until it has healed.

### What kind of anaesthetic?

This may be done with a spinal anaesthetic where you will have an injection in your back that makes you numb from the waist down.

Alternatively, you may have a general anaesthetic where you will be asleep during the operation. The anaesthetist will talk this through with you and advise which may be the most appropriate for you.

### Will I have a catheter?

Yes, you will have a catheter for a day or two after the operation. A catheter is a long, thin, flexible, soft, hollow tube that goes up into your bladder,

through your urethra (water pipe) and drains urine into a bag. Some men still feel that they need to pass urine even though they have a catheter in place. Let the nurses know as they can give you medication to help.

You might see that your urine is stained with some blood. You will notice that this will be getting clearer before the catheter is taken out, about 48 hours after your operation.

Occasionally, you may be sent home with the catheter still in place. The nurses in the hospital will show you how to look after the catheter at home and may arrange for a nurse in the community to check on how you are doing. There is a leaflet available from Prostate Scotland called 'Caring for your catheter at home'. This can be downloaded from our website [www.prostatescotland.org.uk](http://www.prostatescotland.org.uk), contact us on [info@prostatescotland.org.uk](mailto:info@prostatescotland.org.uk) or call us and a copy can be sent to you.

### **After the operation, what is likely to happen when I am in the ward?**

- The nurses on the ward will regularly check your blood pressure, temperature, pulse, breathing, if you have any pain, if urine is draining into the bag, if it is blood stained and will also check on any other drips you may have;
- You will have bags of salt solution (saline) attached to the catheter to wash out blood and debris from the bladder. This continues until there is no or only traces of blood in the urine;
- You may find that you have an intravenous drip (IV or drip) when you come back from theatre but this will usually be taken out very quickly;
- You will probably be able to eat and drink normally very soon after your operation.

### **Is there anything that I should do after my operation?**

- Let the nurses know how you are feeling for instance if you are in a lot of pain or if you feel sick. There are medications that can be given to help;

- If you have been asked to do leg exercises to help with your circulation, then try to do these regularly. Don't cross your legs as this can squeeze your veins and may cause a blockage. You may be given special stockings to wear or possibly an injection to help prevent any blood clots;
- The nurse or physiotherapist will encourage you to get up and about as quickly as you can as this can help with your recovery;
- Make sure that you are drinking about 8 glasses of fluid throughout the day.

### **How long might I be in hospital?**

You may be in hospital for 2 - 3 days. Ask at the clinic or while you are on the ward for more information on how long your stay is likely to be. You will usually be discharged when you can pass urine without any problems. Occasionally you may have to go home with a catheter in place and then go back to the ward or clinic to have this taken out.

### **Are there any potential side-effects?**

#### **Blood in your urine**

After your operation, you may see some blood or small blood clots in your urine for several weeks, but especially around 7 - 10 days after the surgery. This is quite usual and might last for a few days. Don't be concerned unless you are having difficulty passing urine, passing large blood clots or have a lot of discomfort. If this is the case you should contact your doctor.

For very few men, less than 1%, it may mean that they need to have a blood transfusion.

#### **Pain or discomfort**

For a few days after your TURP, you may have some discomfort so you will most likely be given painkillers to help. If you're concerned, or have a lot of discomfort, then you should contact your doctor. You may find this particularly bothersome over the first few weeks when you pass urine and it can take up to 3 months for this to settle down.

### Frequency

You may find that you need to pass urine frequently for a few weeks and occasionally up to 3 months after the operation as the area heals.

### Infection

Once you are home contact your doctor or CNS for more advice if you notice that:

- Your urine is cloudy and smelly;
- You need to pass urine more often;
- You have to get to the toilet urgently;
- You have a burning feeling when passing urine;
- You are feverish (feel hot, cold and shivery) and have a high temperature (over 38°C).

These may be signs that you have a urinary tract infection. Contact your GP who may ask you for a sample of urine to check for any signs of bacteria (germs). If you have a urine infection then you will be given antibiotics to take.

If you have gone home with a catheter contact your doctor, district nurse or NHS 24 for more advice if you notice that:

- Urine hasn't drained into the bag for a few hours;
- Your catheter is leaking.

### Urgency

You may find an urgency in passing urine. Most men find this settles down very quickly perhaps after a few days whilst for others it may take slightly longer, anything up to a few weeks or months. In rare circumstances, you may become incontinent which means that you can't control some urine leaking out.

Pelvic floor exercises may help some men who find it difficult to control their bladder and in fact you may already have been advised to do these exercises before your operation. If you want to find out more, speak to nursing staff about whether pelvic floor exercises may help you and for some guidance on how these are done. In some hospitals there may be a

specialist physiotherapist who will see you on the ward and explain how to do these exercises.

Prostate Scotland has a booklet available 'Spotlight on pelvic floor exercises for men' which can be downloaded from our website or by calling us and a copy can be sent to you.

### Retrograde ejaculation

Most men (about 70%) who have a TURP will experience retrograde ejaculation. This means that at orgasm nothing will come out of your penis because the semen has passed backwards into your bladder rather than down the penis. It won't do you any harm and will pass out in your urine the next time you go to the toilet but it will make your urine look cloudy.

Retrograde ejaculation can, of course, affect fertility although you shouldn't rely on this as a method of contraception. If retrograde ejaculation happens to you then it is usually permanent.

### Erection difficulties

There is a small risk of some erection difficulties after the operation and it's best to talk this through with your surgeon. You should be aware that there could be some change in the sensation or how you feel when you have an orgasm. Up to half of all men who have a TURP say that there is a definite change.

### How long will these side-effects last?

Most side-effects and symptoms settle down over a few weeks but it can take up to 3 months after your operation. Some urinary symptoms such as frequency, urgency and discomfort when passing urine may take a bit longer to settle down. Retrograde ejaculation is usually permanent if it occurs.

### What happens next?

The tissue or 'trimmings' removed from your prostate will be sent to the laboratory to be carefully checked under a microscope. For the vast majority of men this will come back as normal tissue and support the original diagnosis

of BPH (benign prostatic hyperplasia). Just occasionally though, prostate cancer cells may be found and prostate cancer diagnosed. The doctor will talk this through with you when you go back to the clinic.

### Getting home

Even though you don't have a wound that you can see, you have still had a significant operation and it will take time to recover. Here are a few simple things to help with your recovery:

<b>Resting</b>	You may feel tired when you get home so take it easy for the first few days but try to get up and move around as much as you are able to as this can help with your recovery
<b>Antibiotics</b>	If you have been given antibiotics to take, remember to finish all the tablets
<b>Medications</b>	If some of your medications were stopped before your operation for example warfarin, clopidogrel, aspirin, ibuprofen or other non-steroidal anti-inflammatory drugs ask the nurse or doctor when you can start to take these again
<b>Pelvic floor exercises</b>	If you have been advised to do pelvic floor exercises, ask staff on the ward how often to do these and for how long you should keep doing them when you get home
<b>Heavy lifting</b>	It's best to avoid lifting anything too heavy for the first 3 - 4 weeks
<b>Operating heavy machinery</b>	It's best to avoid this for about 6 weeks
<b>Exercise</b>	You should be able to go back to light exercise and activities after a week or so but avoid strenuous exercise for about 6 weeks

<b>Time off work</b>	Usually this is for about a minimum 2 weeks but this can be longer depending on if your job is very strenuous. You can ask your doctor how soon you can go back to work
<b>Driving</b>	It's best not to drive for a minimum of 2 weeks, but check this out with your surgeon
<b>Drinking</b>	Try to drink about eight glasses of water every day to flush the bladder out. If you find that you need to pass urine frequently during the day, it might help to avoid drinks that have caffeine such as tea, coffee, cola drinks and energy drinks that have caffeine added. Avoid excess alcohol
<b>Eating</b>	Try to eat plenty of fresh fruit, vegetables, pulses and wholegrain foods to avoid constipation. If you are constipated, you may need a laxative. Ask your doctor for more information about this
<b>Sexual intercourse</b>	You should be able to have sexual intercourse about 3 - 4 weeks after surgery, as long as there is no bleeding and you and your partner both feel ready

### What next?

When you get home, a letter will be sent to your GP letting him/her know about your operation, so if you have any difficulties or concerns then you should contact your GP or NHS 24.

About 2 weeks after your surgery you should get the results on the tissue from your prostate that was sent to the lab. If you haven't heard by the end of 3 weeks, there's no harm phoning your GP or hospital to ask about your results.

You may be sent an out-patient appointment for the urology clinic for about 6 - 12 weeks after your operation. Alternatively some hospitals offer telephone or nurse follow up.



If you are followed up in the clinic tests may include:

- Urine flow measurement. You may be given this test to check your urine flow after your TURP. The flow test works best if you pass a lot of urine, (more than 200mls about a paper cup) so you may be asked to go into the hospital with a comfortably full but not overfull bladder or you might be given water to drink and wait until your bladder is full. All you have to do is pass urine into a funnel-shaped container and all the measurements are done automatically;
- Ultrasound scan. You may have a scan to check how well your bladder is emptying;
- Symptom check. The CNS or doctor will ask how you are feeling and may ask you questions or ask you to fill in a short questionnaire about your symptoms. This is to find out if your symptoms have improved since your treatment;
- If all your test and tissue sample results are fine and your symptoms have improved you may not need to go back to the hospital for any more appointments;
- If you have gone home with a catheter then the nursing staff on the ward will most likely contact the district nurse to help with the care of your catheter. If you have been discharged with a catheter you will be given an appointment to have this taken out. You may hear this called TWOC or 'trial without catheter'.

### What happens during Green Light Laser (GLL)?

This section is to give you more information if your doctor has suggested or if you are thinking about green light laser (GLL) to treat your enlarged prostate. As with TURP or HoLEP, treatment with GLL should make it easier for you to pass urine and may perhaps help with your other symptoms.

#### What happens?

*(Please remember that information given is general guidance. As there is more than one approach and treatment procedures may vary slightly, ask for more advice from staff at the hospital you are attending.)*

### Green Light Laser (GLL)

Most likely you will have had a pre-operation check-up with your doctor who will have run some tests to make sure that you are fit enough to have the operation. You will most likely be admitted to the hospital on the day that you will have your operation. Normally you shouldn't eat or drink about 6 hours before your operation is due to take place but you should follow any specific advice given by the doctor at the hospital you attend.

- Once the operation has been explained to you and you have agreed to it, you will be asked to sign a consent form saying that you agree to have GLL. This might have been done in the clinic before you are admitted to the ward;
- On the day of your operation, you may be given medicine to help you relax and feel sleepy, before the doctor begins treating your prostate tissue with the laser;
- At the same time you may be given antibiotics to reduce the risk of infection;
- You may be asked to empty your bladder;
- After having an appropriate anaesthetic, the urology surgeon will pass a small special telescope-like instrument, called a cystoscope, into your urethra (your water-pipe) and the green light laser is led in through this 'telescope'. The high powered green light laser is carefully used to target, heat up and destroy (you may hear this called vapourise) the extra tissue squeezing the urethra;
- Once the extra tissue has been destroyed, the surgeon will put a catheter in your bladder to drain urine and to help the rest of your prostate tissue heal.

#### Will I have an anaesthetic?

Most men will have a general anaesthetic where they will be asleep during the operation whilst other men may have a spinal anaesthetic where they will be numb from the waist down. Ask which type you are likely to have.

### **Will I have a catheter?**

When the doctor has finished treating the prostate tissue with the laser, a catheter might be put into your bladder to drain urine while the rest of your prostate is healing. This is usually for just a short time and may be taken out before you go home. Occasionally you may need to have a catheter overnight or for some men it may be slightly longer.

### **How long might I be in hospital?**

You will most likely go home within 24 hours of having the laser treatment and some men go home on the same day that they have their treatment.

### **Are there any potential problems that I should look out for after GLL?**

Just like any other medical treatments there is the possibility of side-effects with GLL. The most common side-effects include:

#### *Bleeding*

There may be a very small amount of blood in your urine making it look blood stained, but this normally settles down within 1 - 2 weeks. Usually this happens when you just begin to pass urine.

#### *Bladder spasm*

You may feel a strong tightening or cramping in the bladder with a feeling of needing to pass urine without much warning.

#### *Discomfort passing urine*

Because your urethra might be a bit swollen or sore after the treatment, it's quite common to have some discomfort or a mild burning feeling when you first start passing urine. Your doctor or CNS will probably give you pain-killers to help.

You might notice too that you have to go to the toilet more often during the day or night for about a week or so. If you have difficulties controlling your urine, it may help to do pelvic floor exercises. The nurses on the ward, CNS,

or in some hospitals, a specialist physiotherapist can explain how to do these exercises. There is a leaflet available from Prostate Scotland on pelvic floor exercises [www.prostatescotland.org.uk](http://www.prostatescotland.org.uk) or call us for a copy.

If you find that you can't pass urine after your catheter has been taken out you may need to have another catheter for a few weeks so your bladder can rest.

#### *Problems with erections*

Some men find that there is a small change in the quality of their erection.

#### *Retrograde ejaculation*

Most men (between 50 - 70%) who have GLL will experience retrograde ejaculation. This means that at orgasm nothing will come out of your penis because the semen has passed backwards into your bladder rather than down the penis. It won't do you any harm and will pass out in your urine the next time you go to the toilet but it will make your urine look cloudy. It's quite common to leak a little urine at the time of ejaculation as the muscles relax.

Retrograde ejaculation can, of course, affect fertility although you shouldn't rely on this as a method of contraception. If retrograde ejaculation happens then it's usually permanent.

#### *Urgency*

Some men may find that they need to rush to the toilet for the first few days after GLL treatment but this settles down very quickly.

### **Going home**

It may be best if you wear loose fitting clothing when going in to have the treatment and then for going home so that you feel quite comfortable. Always arrange to be brought into hospital and then picked up as you shouldn't drive for about 24 hours after having an anaesthetic.

It's important to drink enough fluid every day, throughout the day – about 6 - 8 mugs/glasses (about 1½ - 2 litres). This will also help you avoid getting a urine infection.



Once you are home, contact your doctor or CNS for more advice if you have any of the following:

- Large amounts of blood in your urine;
- Blood in your urine that is bright red;
- A high temperature above 38°C;
- Are feverish - feeling hot, cold and shivery.

If you have gone home with a catheter contact your doctor, district nurse or NHS 24 for more advice if you notice that:

- Urine hasn't drained into the bag for a few hours;
- Your catheter is leaking.

### What happens next?

You will most likely be given an appointment, either before you leave the ward or it will be posted out to you, to come back to the hospital clinic in about 6 - 12 weeks' time for a check-up with the doctor or CNS. In some areas, this may be done by a consultation with you over the phone.

Follow up clinic tests may include:

- Urine flow measurement. You may be given this test to check your urine flow after your laser treatment. The flow test works best if you pass a lot of urine, (more than 200mls) so you may be asked to go into the hospital with a comfortably full but not over full bladder or you might be given water to drink and wait until your bladder is full. All you have to do is pass urine into a funnel-shaped container and all the measurements are done automatically;
- Ultrasound scan. You may have a scan to check how well your bladder is emptying;
- Symptom check. The CNS or doctor will ask how you are feeling and may ask you questions or ask you to fill in a short questionnaire about your symptoms. This is to find out if your symptoms have improved since your treatment;

- If your test results are fine and symptoms have improved you may not need to go back to the hospital for any more appointments;
- If you have been discharged with a catheter you will be given an appointment to have this taken out. You may hear this called TWOC or 'trial without catheter'.

### Holmium Enucleation of the Prostate (HoLEP)

This section gives you more information if your doctor has suggested, or if you are thinking about, HoLEP to treat your enlarged prostate. As with a TURP and GLL, treatment with HoLEP should make it easier for you to pass urine and may perhaps help with your other symptoms.

### What happens during HoLEP

*(Please remember that this is general guidance. As there is more than one approach and treatment procedures may vary slightly, ask for more advice from staff at the hospital you are attending.)*

Most likely you will have had a pre-operation check-up with your doctor who will have run some tests to make sure that you are fit enough to have the operation.

Depending on hospital procedures, you might be asked to go into hospital the day before, or, you may be admitted on the morning that your operation is due to take place.

Normally, you shouldn't eat or drink for about 6 hours before your operation is due to take place but you should follow any specific advice given by the doctor at the hospital you attend.

- The doctor will explain the operation to you, give you the chance to ask any questions and if you agree then you will be asked to sign a consent form. This might have been done in the clinic before you are admitted to the ward;
- Just before your operation, you may be given medicine to help you relax and feel sleepy, before the doctor begins treating your prostate tissue with the laser;

- At the same time you may be given antibiotics to reduce the risk of infection;
- After having an appropriate anaesthetic, the urology surgeon will pass a small special telescope-like instrument, called a cystoscope, into your urethra (your water-pipe) and the high powered laser is led in through this 'telescope';

This laser is then used to carefully trim off the extra prostate tissue causing the blockage and these pieces are carefully pushed into the bladder;

Then, another piece of equipment, called a morcellator, is used to take the pieces of prostate tissue out of the bladder. The operation usually takes about 45 - 60 minutes depending on the size of your prostate. One of the benefits of this type of laser treatment, compared to GLL, is that pieces of tissue from your prostate can be sent to the lab to be looked at under a microscope to see if there are any changes in the tissue .

### **Will I have an anaesthetic?**

Yes, either a general (where you will be fully asleep) or a spinal anaesthetic (where you are awake but unable to feel anything from the waist down).

### **Will I have a catheter?**

When the operation is finished, a catheter is put into your bladder and left in overnight to drain urine from the bladder. Some men can't pass urine after their catheter is taken out, so may have to go home with a catheter for a short time to help with healing.

### **How long might I be in hospital?**

Usually for about 1 - 2 days. Most likely you will go home the day after your surgery once you have passed urine but you may be kept in longer if necessary.

### **Are there any potential problems that I should look out for after HoLEP?**

Just like any other medical treatments there is the possibility of side-effects with HoLEP. The most common side-effects include:

#### *Bleeding*

It's quite common to have some blood in your urine for about 12 hours after this operation although some men may lose a bit more blood for slightly longer. During this time, it's best to drink plenty of water for a few days while it clears. You may find that your urine turns bloody again for the first 24 - 48 hours after your catheter has been taken out. It's fairly common to pass very small amounts of blood in urine every now and again for up to 6 weeks after your treatment.

#### *Discomfort when passing urine*

Because your urethra might be a bit swollen or sore after the treatment, it's quite common to have some discomfort or a mild burning feeling when you first start passing urine. You might notice that you have to go to the toilet more often during the day or night for about a week or so. Your doctor or CNS will probably give you pain-killers to help. Occasionally, you may notice that you pass very small pieces of tissue in your urine during the first month as your prostate heals.

If you have difficulties controlling your urine, it may help to do pelvic floor exercises. The nurses on the ward, CNS, or in some hospitals, a specialist physiotherapist can explain how to do these exercises. There is a leaflet available from Prostate Scotland on pelvic floor exercises [www.prostatescotland.org.uk](http://www.prostatescotland.org.uk) or call us for a copy.

#### *Problems with erections*

Some men find that there is a small change in the quality of their erection and a very small number of men find it difficult to get and keep an erection.

### *Retrograde ejaculation*

Most men (between 50 - 70%) who have HoLEP will experience retrograde ejaculation. This means that at orgasm nothing will come out of your penis because the semen has passed backwards into your bladder rather than down the penis. It won't do you any harm and will pass out in your urine the next time you go to the toilet but it will make your urine look cloudy. It's quite common to leak a little urine at the time of ejaculation as the muscles relax. Retrograde ejaculation can, of course, affect fertility although you shouldn't rely on this as a method of contraception. If retrograde ejaculation happens then it's usually permanent.

### *Urgency*

Some men may find that they need to rush to the toilet for the first few days after HoLEP treatment but this settles down usually around 2 weeks after the procedure.

### **Going home**

You may be asked to do pelvic floor exercises when you get home. Ask the nurses on the ward, CNS or specialist physiotherapist for more information about these.

It's important to drink enough fluid every day, throughout the day – about 6 - 8 mugs/glasses (about 1½ - 2 litres). This will also help you avoid getting a urine infection.

Once you are home, contact your doctor or CNS for more advice if you have any of the following:

- Large amounts of blood in your urine;
- Blood in your urine that is bright red;
- A high temperature above 38°C;
- Are feverish - feeling hot, cold and shivery.

If you have gone home with a catheter contact your doctor, district nurse or NHS 24 for more advice if you notice that:

- Urine hasn't drained into the bag for a few hours;
- Your catheter is leaking.

### **What happens next?**

The tissue samples will be sent to the lab to be checked under a microscope. About 2 weeks after your surgery, the urologist should get the results on the prostate tissue that was sent to the lab. If you haven't heard by the end of 3 weeks, there's no harm phoning your GP or hospital to ask about your results.

You will most likely be given an appointment, either before you leave the ward or by post, to come back to the hospital clinic in about 6 - 12 weeks' time for a check-up with the doctor or CNS. In some areas, this may be done by a consultation with you over the phone.

Follow up clinic tests may include:

- Urine flow measurement. You may be given this test to check your urine flow after your laser treatment. The flow test works best if you pass a lot of urine, (more than 200mls) so you may be asked to go into the hospital with a comfortably full but not over full bladder or you might be given water to drink and wait until your bladder is full. All you have to do is pass urine into a funnel-shaped container and all the measurements are done automatically;
- Ultrasound scan. You may have a scan to check how well your bladder is emptying;
- Symptom check. The CNS or doctor will ask how you are feeling and may ask you questions or ask you to fill in a short questionnaire about your symptoms. This is to find out if your symptoms have improved since your treatment;
- If all your test and tissue sample results are fine and your symptoms have improved you may not need to go back to the hospital for any more appointments;
- If you have been discharged with a catheter you will be given an appointment to have this taken out. You may hear this called TWOC or 'trial without catheter'.

**Comparing TURP, Green Light Laser (GLL) and HoLEP treatment**

QUESTION/TOPIC	TURP	GLL	HoLEP
Is this a suitable treatment for all men with BPH?	This is the most common type of surgery for men whose prostate enlargement requires surgery and where medication is no longer sufficient	This is especially useful for men who are on blood thinning tablets such as Aspirin or men who are taking anti-coagulation drugs such as Warfarin  If you take Clopidogrel on a regular basis, you will most likely be asked to stop about 10 days before you go into hospital for your operation. This drug can cause increased bleeding after prostate surgery  If at all possible, you will be asked to stop your warfarin but never stop taking this without being told to do so by your doctor	This is especially useful for men who are on blood thinning tablets such as Aspirin or men who are taking anti-coagulation drugs such as Warfarin  If you take Clopidogrel on a regular basis, you will most likely be asked to stop about 10 days before you go into hospital for your operation. This drug can cause increased bleeding after prostate surgery  If at all possible, you will be asked to stop your warfarin but never stop taking this without being told to do so by your doctor
Is this treatment suitable if my prostate is very large?	TURP may be suitable for large prostates	GLL may not be suitable for very large prostates	HoLEP is suitable for very large prostates
Is this treatment available in all areas?	Most likely	Not in all areas but becoming more readily available so you may need to be referred to another area involving extra travelling	Not in all areas but becoming more readily available so you may need to be referred to another area involving extra travelling
How long does the procedure take?	Usually up to an hour	Usually about 60 - 90 minutes	Around 45 - 60 minutes, depending on size of the prostate
Will I have an anaesthetic?	Yes. This could be a general or spinal anaesthetic	Yes. This could be a general or spinal anaesthetic	Yes. This could be a general or spinal anaesthetic
How quickly might this improve my flow of urine?	Almost immediately	Almost immediately	Almost immediately
Will I need to stay in hospital and for how long?	This might be for about 2 - 3 days	You may need to stay in overnight. Some men are able to go home on the day of their surgery	About 1 - 2 days
What about blood loss?	You will have some blood loss for a few days	Because the blood vessels of your prostate are sealed while the extra prostate tissue is destroyed there is very little blood loss	Because the blood vessels of your prostate are sealed while the extra prostate tissue is removed there is very little blood loss
Will you be able to examine the prostate tissue for any other disease?	Yes	No, because all the tissue has been destroyed	Yes, as the pieces are taken out
Am I likely to have a catheter and for how long?	Usually for about 2 days after your operation	For a short time (usually less than 24 hours after the treatment) and will most likely be taken out before you get home	For a short time (usually about 12 - 24 hours after the treatment) and will most likely be taken out before you get home
How soon can I go back to work?	Usually a minimum of about 2 weeks but may be longer if you have a very strenuous job	If you don't have a strenuous job then usually in about a week	If you don't have a strenuous job then usually in about 1 - 2 weeks' time but you shouldn't do any heavy lifting

Table continued overleaf.

### Comparing TURP, Green Light Laser (GLL) and HoLEP treatment

QUESTION/TOPIC	TURP	GLL	HoLEP
What about sexual intercourse?	Usually in about 3 - 4 weeks if you don't have any bleeding and you and your partner both feel ready	Usually in about 3 weeks if you don't have any bleeding and you and your partner both feel ready	Usually in about 3 - 4 weeks if you don't have any bleeding and you and your partner both feel ready
What about erection difficulties?	There is a small risk. Speak to your surgeon for more information	Possibly a small change in the quality of your erection	Possibly a small change in the quality of your erection
Is retrograde ejaculation likely?	About 70% of men experience this and if it happens it is usually permanent	Between 50 – 70% of men experience this and if it happens it is usually permanent	Between 50 – 70% of men experience this and if it happens it is usually permanent
What about incontinence?	This can take a few days up to a few months to settle down	For a few days	For a few days and possibly for a few months if your bladder has been over-active
How soon can I go back to normal non-strenuous activities? Strenuous activities?	You can go back to light exercise and activities after a week or so but avoid strenuous activities for about 6 weeks	You can go back to light exercise and activities in about a week but avoid strenuous activities for around 4 weeks	You can go back to light exercise and activities in about a week but avoid strenuous activities for around 4 weeks
How soon can I drive?	In about 3 - 4 weeks' time. (As some car insurances may not be valid when you are recovering from an operation you may want to check with your particular insurance company)	In about a week's time. Ask your doctor for more information. (As some car insurances may not be valid when you are recovering from an operation you may want to check with your particular insurance company)	In about a week's time. Ask your doctor for more information. (As some car insurances may not be valid when you are recovering from an operation you may want to check with your particular insurance company)
Anything else I need to know?	Avoid becoming constipated as straining may lead to bleeding	Avoid becoming constipated as straining may lead to bleeding	Avoid becoming constipated as straining may lead to bleeding
Now I've had the treatment, will I still need to take the medication I took for my prostate problem?	You shouldn't need to but always check this out with your doctor	You shouldn't need to but always check this out with your doctor	You shouldn't need to but always check this out with your doctor
Will I have follow-up appointments?	Possibly an out-patient appointment in about 6 - 12 weeks' time. Some hospitals may offer telephone or nurse specialist follow-up	Possibly an out-patient appointment in about 6 - 12 weeks' time. Some hospitals may offer telephone or nurse specialist follow-up	Possibly an out-patient appointment in about 6 - 12 weeks' time. Some hospitals may offer telephone or nurse specialist follow-up
Am I likely to need any further treatment for my BPH?	About 1 in 10 men will need a further operation as the prostate tissue re-grows. However, this may take several years to happen, possibly in the region of 5 - 8 years	Studies have shown that about 1 in 10 men will need further treatment as the prostate tissue re-grows. However, this may take several years to happen, possibly in the region of 5 - 8 years	Studies have shown that about 1 in 10 men will need further treatment as the prostate tissue re-grows. However, this may take several years to happen, possibly in the region of 5 - 8 years

### **Getting more information**

If you have any questions about treatments then it may be a good idea to write these down and speak to the doctor looking after you in hospital, the clinical specialist nurse or your GP.

### **Additional resources that you may find helpful**

Other leaflets from Prostate Scotland that you may find helpful include:

- Benign Prostatic Hyperplasia Explained (BPH);
- Spotlight on Caring for your catheter at home;
- Spotlight on Pelvic floor exercises;
- Spotlight on Incontinence as a symptom of prostate problems.

These can be downloaded from our website **[www.prostatescotland.org.uk](http://www.prostatescotland.org.uk)** or contact us on **[info@prostatescotland.org.uk](mailto:info@prostatescotland.org.uk)** or call us for copy.