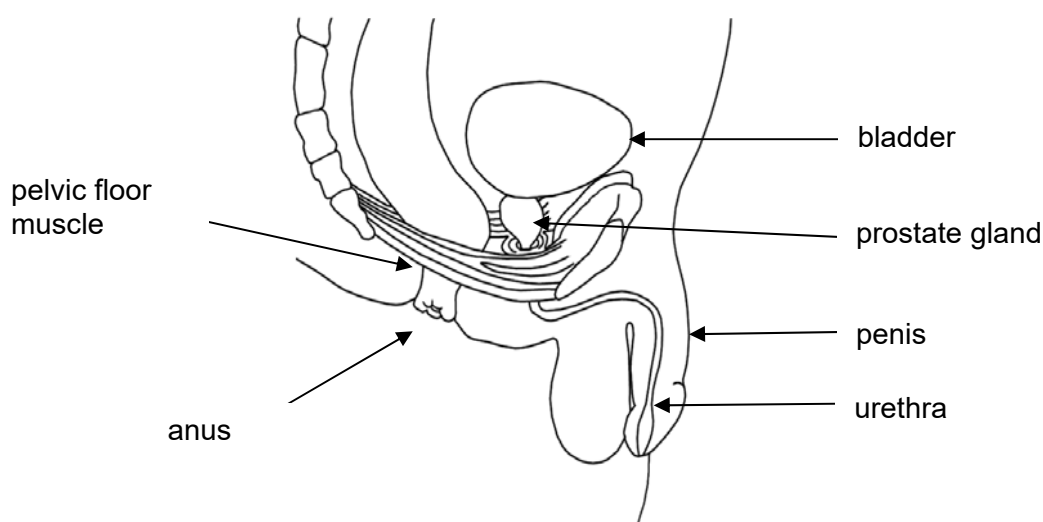


Treating your enlarged prostate gland using holmium laser enucleation of the prostate (HoLEP)

This leaflet will answer any questions you may have about having holmium laser treatment for your enlarged prostate. It explains why this treatment may be suitable for you, its risks and benefits and what you can expect if you decide to have this treatment. If you have any questions, please ask your prostate nurse specialist who will be happy to help.

What is the prostate?

Your prostate is part of your reproductive system. It is a plum-sized gland and is only found in men. It lies at the base of your bladder and surrounds your urethra (tube that takes urine from the bladder, along the penis and out of your body). Your prostate produces nutrients for your sperm, which makes up part of the milky fluid (semen) when you ejaculate.



Why has my prostate enlarged?

As men get older, the cells of the prostate begin to swell, which increases the size of the prostate. This is called benign prostatic hyperplasia (BPH), which means extra growth of normal (non-cancerous) cells. This isn't usually serious, but sometimes the prostate grows so large that it puts pressure on your urethra (the tube you pass urine through). This can make it difficult for you to pass urine and may cause other urinary symptoms such as

- not being able to empty your bladder completely, so you may need to go to the toilet more often (referred to as frequency)
- having a weak urine flow
- having to strain to pass urine.

Because of the squeeze on your urethra, you may have to use a lot of pressure to pass urine. In the long term, this can damage your bladder and kidneys.

Why do I need this treatment?

Not everyone who develops an enlarged prostate will need treatment. However, your consultant has recommended holmium laser treatment as the best option to relieve your symptoms. It will make it easier for you to pass urine and may relieve your other symptoms, although it may not resolve all of them.

If you do not have treatment, your prostate will continue to grow. This may make your symptoms worse and increases the possibility of problems with your bladder and/or kidneys.

What does holmium laser treatment involve?

A thin telescope-like instrument is inserted into your urethra. The high-powered laser is then inserted through this instrument and used to carefully remove the excess prostate tissue that is causing obstruction of the urethra.

The residual pieces (or lobes) of the prostate are removed by the surgeon. This tissue can be examined to check for cancerous cells. This differs from some other laser procedures which work by completely destroying the prostate tissue that is removed.

When the surgeon has finished lasering your excess prostate tissue, a catheter will be inserted. Depending on the time of your surgery, the catheter will be removed on the evening of surgery (before you go to sleep) or early in the morning.

The operation can be carried out either under a general anaesthetic, which means you will be asleep for the entire procedure, or under a spinal anaesthetic where you remain awake, but your body is numb from the waist downwards and you do not feel pain.

What are the benefits of this treatment?

The holmium laser seals the blood vessels of the prostate tissue. This means there is very little blood loss in comparison to the other surgical options outlined below.

The catheter that is inserted after the procedure can usually be removed between 12 – 24 hours of the surgery. This allows you to leave hospital more quickly than the other surgical options below and reduces your recovery time.

Are there any alternatives?

There are several alternative treatment options outlined below, although they may not all be appropriate for you. Your consultant or nurse specialist will discuss these with you if they are suitable for your situation:

- **Observation of your symptoms.** Some men may want time to think about surgery, or to wait and see if their symptoms become any worse before opting for treatment.
- **Medicines.** There are two types of medicine available. They either shrink your prostate, or relax the muscles in your prostate and bladder to improve the flow of urine. However, the effects only last as long as you take the medicine. You may have already tried this option without success.
- **Transurethral resection of the prostate (TURP).** This is an operation to remove the parts of your prostate that are pressing on your urethra, to make it easier for you to pass urine. It involves a surgeon inserting a special telescope-like instrument into your urethra, which has a heated wire at one end. This is then used to destroy the prostate tissue or cut it into pieces.
- **Open (traditional) surgery (Millin's prostatectomy).** This is considered if your prostate is too large to be removed via a TURP.
- **laser prostatectomy surgery.** This is an operation to remove the parts of your prostate that are pressing on your urethra, to make it easier for you to pass urine. It involves a surgeon inserting a special tube into your urethra then using a laser to destroy the prostate tissue or cut it into pieces.
- **Prostatic stent.** This is where an expandable tube is inserted into your urethra, to push back the prostatic tissue and widen your urethra.
- **Use of a permanent catheter.** This is an option for men who do not want, or who are not suitable for any of the treatments above.
- **Prostate arterial embolisation.** This is a minimally invasive procedure that blocks the arteries that supply blood to the prostate, and is performed under local anaesthetic. A radiologist uses an x-ray camera to guide the delivery of small particles to block about 90% of the prostate arteries, they are injected through a catheter (thin tube).

What are the risks?

- **Urinary frequency and urgency.** It is not uncommon to experience this after the procedure. These symptoms should go within six to 12 weeks. If they persist you may need further treatment which you will receive at your follow-up appointment, but it could also be the result of an infection. Please contact your GP to check that you do not have a urinary infection.
- **Urinary infection.** This can cause symptoms such as pain, blood in the urine, or a burning feeling when passing urine, but can be treated with antibiotics. This happens to about five in 100 patients.
- **Retrograde ejaculation.** This is where your semen travels to your bladder when you ejaculate, rather than out through your penis. This is not harmful – the semen will leave your bladder the next time you pass urine and may make your urine appear cloudy. This occurs in about seven in 10 men having this treatment and is a long-term side effect. You will still be able to have an erection and orgasm, but your fertility may be affected. Do not rely on this as a form of contraception.
- **Erectile dysfunction.** The nerves that control your erections are very close to the prostate gland. About 15 in 100 patients may notice a slight deterioration in the quality of their erections, which will usually respond to medication. However, about three in 10 men will notice that their erectile function improves significantly because their quality of life has improved after surgery.

- **Bleeding.** There is much less bleeding with holmium laser treatment compared with other surgical procedures for an enlarged prostate. If the bleeding is severe you may need a blood transfusion, but this is extremely rare.
- **Self-catheterisation.** Occasionally, if your bladder is weak as a long term result of your enlarged prostate gland, you may need to use a catheter to empty your bladder. If this risk applies to you, your consultant will discuss this with you in more detail.
- **Prostate re-growth.** Your prostate continues to enlarge even after surgery and if your symptoms return you may need another operation in the future. About three in 100 men need further surgery within a year of this treatment.
- **Deep vein thrombosis (DVT).** Any surgery carries the risk of DVT. This is where a blood clot forms in your veins or arteries, most commonly in the legs. This happens to less than one in 100 people).
- **Injury to the urethra,** causing delayed scar formation. This does not delay your recovery, but can lead to urethral stricture, which is where a section of the urethra narrows, reducing the flow of your urine. This happens to about two in 100 men who have this procedure.

Preparing for surgery

You will be offered a choice of dates for your surgery. You will need to attend the pre-assessment clinic where we will assess your suitability for surgery under anaesthetic. You will either attend this appointment straight from clinic, or we will send an appointment date by post. Your surgery will not go ahead until you have been passed as fit at the pre-assessment clinic.

If you smoke, you may be asked to stop smoking, as it increases the risk of developing a chest infection or DVT. Smoking can also delay wound healing because it reduces the amount of oxygen that reaches the tissues in your body. If you would like to give up smoking, please telephone the NHS Smoking Helpline (details at the end of this leaflet).

Please do not eat or drink anything (except non-fizzy water) for six hours before your appointment. This means that you cannot suck on sweets or chew gum. You are allowed to drink water up to two hours before your appointment. **If you continue to eat or drink after this, your surgery will be cancelled.**

Please continue to take all your medicines unless you are told otherwise and remember to bring them into hospital with you.

What should I expect when I come to hospital?

If you arrive on the ward the day before your surgery, you will be seen by a nurse who will ask you some questions, show you around the ward and prepare you for theatre. If you arrive at the surgical admissions lounge, usually at 7am or 11am, the nurses there will prepare you for your surgery. You will be advised of your arrival time.

Consent – asking for your consent

We want to involve you in all the decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form by your consultant or one of his team to confirm that you agree to have the procedure and understand what it involves

If you would like more information about our consent process, please speak to a member of staff caring for you.

The anaesthetist will visit you to discuss your anaesthetic. You should have been given a copy of the leaflet **Having an anaesthetic** – please ask the staff for a copy if you have not received this. If you have any further questions or concerns, your specialist nurse will be available to answer them.

After your surgery

You should not have any pain from the operation, but you may have some discomfort from the catheter. Some men experience bladder spasms (contractions) caused by the catheter rubbing against the trigone (muscle) inside your bladder. The spasms result in urine passing down the sides of the catheter which may leak into your underwear. The spasms may also make you have the urge to pass urine, which can be uncomfortable. If you experience these spasms or have a sudden urge to pass urine, please tell a member of staff, as these symptoms can often be relieved.

What problems might I experience after the surgery?

You may experience a mild burning feeling or find it a little uncomfortable to pass urine at first. This is because your urethra will be swollen and sore from the surgery and having the catheter in place. This is normal and should not last long (usually between 10 – 14 days).

Some men find that they cannot pass urine when the catheter has been removed. If this happens, a new catheter will be inserted into your urethra and you may need to keep this in for several weeks to allow your bladder to rest. If this happens to you, you will be taught how to look after the catheter and we will arrange for a district nurse to visit you at home, if necessary.

It is common to have less control passing urine for a short time after surgery. If you experience this, please tell your nurse, who will explain how to perform pelvic floor exercises to improve your control. For more information, please ask for the leaflet, **Pelvic floor exercises for men**.

Once you can pass urine comfortably, you will be allowed home. When you are home please make sure you drink regularly (about one-and-a-half to two litres per day), as poor drinking habits may make it more difficult to regain control of your bladder, and may increase your chances of getting a urine infection.

You may notice blood in your urine for about a week after your treatment, although this is much less common with this treatment than other surgical options.

Leaving hospital

Patients can usually go home within 24 hours of the procedure. It may be possible for some patients to go home on the same day as the procedure.

If you still have a catheter in your bladder, we will arrange for a district nurse to visit you at home. We will give you specific instructions on when and where the catheter is removed.

When will I have a follow-up appointment?

You will be seen in clinic eight to 12 weeks after your surgery, by the surgeon who operated on you. You will be asked to pass urine into a special machine (flow rate machine) to assess your urinary flow after your treatment, so you will need to attend the clinic with a full bladder. You will have a scan of your bladder to make sure you are emptying your bladder when you pass urine. You may also have to fill out a symptom questionnaire, to see if your symptoms have improved since the surgery. If staff are satisfied with the results of these tests, you will be discharged from the clinic.

You will also be given any histology (examination of tissue and cells) results then, which will show whether the tissue removed was cancerous or not.

When can I go back to my normal activities?

- **Heavy lifting.** Do not lift anything heavy, such as a bag of shopping or a vacuum cleaner until one week after your surgery.
- **Sex.** You should be able to have sexual intercourse soon after surgery, as long as there is no bleeding and you and your partner both feel ready.
- **Driving.** If you are discharged from hospital on the same day as your operation, you must ask someone to take you home as you are not allowed to drive within 24 hours of having an anaesthetic. You should only drive again when you are free of pain and able to perform an emergency stop comfortably. You should check with your insurance company to make sure you are covered to start driving again as they may refuse to meet a claim if they feel you have driven too soon.
- **Drinking alcohol.** Your clinical nurse specialist can give you advice about when you can start drinking alcohol.

Contact us

If you have any questions or concerns about holmium laser treatment, please contact one of the prostate nurse specialists **t:** 020 7188 7339, Monday to Friday, 8am to 5pm. Out of these hours contact Florence Ward **t:** 020 7188 8818 or Aston Key Ward **t:** 020 7188 0709.

Alternatively you can call the nurse specialists **t:** 020 7188 7339 (to leave a message) or **t:** 07500 814 939 or 020 7188 6783, or to bleep a prostate nurse specialist, call **t:** 020 7188 7188 and ask for the bleep desk. Ask for bleep 1596 and wait for a response.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Leaflet number: 2354/VER5

Date published: December 2017

Review date: December 2020

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A list of sources is available on request