

GreenLight laser prostatectomy



Information for day surgery patients at
King's College Hospital only

This booklet answers some of the questions you may have about having a GreenLight laser prostatectomy. It explains the risks and the benefits of the procedure and what you can expect when you come to hospital. If you have any questions or concerns, please do not hesitate to speak to the doctors or nurses caring for you.

Confirming your identity

Before you have a treatment or procedure, our staff will ask you your **name** and **date of birth** and check your **ID band**. If you don't have an ID band we will also ask you to confirm your address.

If we don't ask these questions, then please ask us to check.

Ensuring your safety is our primary concern.

What is a GreenLight laser prostatectomy?

It is an operation that uses a laser to remove excess tissue in the central part of your prostate gland. The laser uses concentrated light to generate precise and intense heat which vaporises the tissue. The procedure is also known as photo-selective vaporisation of the prostate (PVP).

Why do I need this procedure?

You usually have this procedure if you have benign (non-cancerous) swelling of your prostate gland. This presses against your urethra (the tube that drains urine from your body) and leads to symptoms such as making it difficult for you to pee. It is very effective in urinary retention

The procedure can also be used to ease the blockage caused by prostate cancer. We do not take out the whole prostate and it is not a cancer operation.

We will discuss this with you at your first outpatient appointment and your surgeon will talk to you about it again on the day of your operation.

What are the benefits?

- The operation removes the central part of your prostate gland, which should enable you to pee normally.
- It is a minimally invasive procedure so you will not have any cuts or stitches.
- Most men have it as a day case procedure – only a small number of patients need to stay in hospital overnight.



What are the risks?

- **Difficulty passing urine:** You may need a catheter (a bendy, hollow plastic tube that drains urine from your bladder) put in for this operation. Some men will be able to go home without a catheter, but some may find it hard to pee for a short time. If this happens, you may need to have a catheter left in for a day or two to rest your bladder. This causes no long-term problems and you do not need to stay in hospital.
- **Bleeding:** although we do not make a cut in your skin, this is still a major operation. You may have some bleeding during the surgery or later. The risk of needing a blood transfusion is less than 1 in 100, even if you are taking blood-thinning medication.
- **Dry orgasm:** this is the most common side effect. It is when your semen falls back into your bladder instead of coming out through your penis. It affects up to 5 in 10 men after PVP. We have ways of trying to reduce this risk which we will discuss with you. The risk of this happening is 9 in 10 with the standard procedure, Transurethral Resection of the Prostate (TURP). You may feel your orgasm is less intense, but you usually learn to appreciate the sensation again. Dry orgasm can cause sterility but you cannot use it as a form of contraception because some sperm may still come out. We have developed techniques to reduce this side effect – let us know if this is important to you.
- **Erectile impotence:** there have been a few reports of erectile impotence after this operation. It could happen if the laser is used too close to the nerves in your penis. The risk is less than 1%.
- **Prostate regrowth:** we do not remove your whole prostate gland, so tissue can regrow. With the TURP procedure, 1 in



7 patients need more (revision) surgery over a 10-year period because of prostate regrowth. About 1 in every 100 patients need revision treatment each year after GreenLight laser surgery.

- **Scar tissue:** As with TURP, scar tissue (a stricture) may form after the operation. If this happens you will need a small operation to put it right. The risk of this happening in the first year with TURP is 1 in 20 and with GreenLight laser surgery it is about 1 in 50.
- **Incontinence:** Surgical incontinence is a very rare side effect. The risk is well under 1 in 500. We may suggest you do pelvic floor exercises while you are recovering from your procedure to help strengthen the muscles around your prostate and become fully continent more quickly.

What are the risks of an anaesthetic?

Straight after a general anaesthetic you may feel tired, dizzy or weak. You must have someone to collect you and stay with you for the first 24 hours. During the first 24 hours you should not:

- drive or operate any motorised vehicle or electrical equipment
- sign any legal documents or make important decisions
- drink alcohol

You may feel weak or dizzy at times during the first 7 to 10 days. If this happens, sit down until the feeling passes. You may also have the 'post-operative blues' and feel a little depressed. If any of these symptoms do not go away, please contact your GP (home doctor) for help and advice.

What are the alternatives?

At your outpatient appointment your surgeon will discuss with you whether you would prefer to manage your symptoms with medicine.



You may have been taking medication to shrink or relax your prostate, or had these offered to you. These medications do not work for everyone.

If you do not have treatment and your prostate keeps getting bigger, it may stop you from peeing. We can ease this for a short while by putting in an 'indwelling' catheter – a type of catheter that you can have in your bladder for a while to drain urine – while we decide whether you need surgery.

Consent

We must by law obtain your written consent to any operation and some other procedures beforehand. Staff will explain all the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to speak with a senior member of the staff again.

What happens before the operation?

Arranging the date for your operation: You will see a doctor in the outpatient clinic who will fill in your admission card. Take this to the Day Surgery Centre, where you will be asked to fill out a health questionnaire.

Pre-assessment clinic: Before having your operation, we may ask you to come to the pre-assessment clinic. A nurse will take your medical history, explain the type of anaesthetic you will have (usually a general anaesthetic) and what to expect after surgery. They will also answer any questions you may have.

Please bring with you details of any medication you are taking or the medicines themselves. Also let the nurse know if you are allergic to any medicines, tablets or plasters.



You will have some screening tests. These include checking your blood pressure, taking a blood sample or having an electrocardiogram (ECG). The nurse will then agree with you a convenient date to come in for your operation.

What happens during the procedure?

You usually have a light general anaesthetic for this procedure. If you have other long-term (chronic) medical conditions, such as problems with your heart or breathing, we may recommend you have a spinal (regional) anaesthetic instead. This means you are awake but have no feeling of pain from the waist down during the operation. If this applies to you we will let you know at your outpatient appointment.

If you have a spinal anaesthetic we will leave a catheter in your bladder after the operation for a short while because you will not be able to pee on your own.

We try not to use sedation and local anaesthetic unless we have to because it is likely to cause you some discomfort.

Once you are in the operating theatre:

- we will pass a telescopic instrument called a cystoscope into your urethra (the tube through which you pee) and up into your bladder to examine it. The cystoscope is about the thickness of a pencil and has a tiny video camera on one end, so we can view images of your bladder on a television screen
- we will vaporise the prostate tissue through the cystoscope using a high-powered laser
- we may place a small catheter in your urethra to drain urine if we have any concerns about whether your bladder will work normally for the first 24 hours after your procedure. This is not usually needed for bleeding



How long does it take?

This depends on the size of your prostate, but on average it takes between 45 to 60 minutes. You should expect to be in the Day Surgery Unit all day to give you time to recover after the procedure.

What happens after the procedure?

If you had a general anaesthetic you will go back to the ward for at least two to three hours because you will feel drowsy and need time to recover. You will need a relative, friend or carer who can escort you home and stay with you for the first 24 hours after your procedure. Please let them know that they may have to wait for you if you are not ready to leave.

Once you feel awake and have had a drink we will encourage you to get up with our help and to move around the ward area.

You may not be able to pee after the operation. This is much more common if your bladder has been stretched or is emptying poorly. This will be discussed with you in detail at your outpatient appointment before your procedure.

It is normal to feel some mild discomfort. Most men need only simple painkillers to ease any pain, although some may need tablets to calm bladder spasm. About 1 in 10 men have burning in their penis for a few weeks after the operation; this is usually irritating rather than painful and always settles down.

You can usually leave hospital on the same day, once you have peed. If you still have a catheter in place, this is usually taken out the next morning. But if you have previously had a problem with not being able to pee, we may suggest leaving it in for a few more days. If so, before you leave the Day Surgery Centre, the nurse will advise when and where to return to have it taken out.



Getting back to normal

Existing symptoms

Most men find their symptoms improve by at least 50% within six weeks of surgery. However, your bladder may be overactive for a few weeks after the operation, so you might think things are getting worse before getting better. So, for a while, we advise you to avoid any long journeys where you cannot use the toilet. This will make it easier for you to go to the toilet when you want and help you to recover quicker.

Your bladder function can keep improving for up to four months after the procedure. If urgency and getting up at night were major problems before your operation, or if you have had any incontinence, we will usually recommend you have an urodynamic examination to confirm that you have excess prostate tissue.

About 1 in 6 still have these symptoms after the operation. If so, we will presume they are caused mainly by your bladder being overactive and offer you medical treatments to ease your symptoms. You will probably pass a little blood in the first few weeks, particularly when you start peeing. This is normal. If bleeding is a major problem, drink lots of water and have a urine sample checked for an infection.

Work and leisure

You can go back to work when you feel fit. You usually need no more than a week off, depending on the type of work you do. Some men have gone back to work within 48 hours.

We advise you to avoid very heavy lifting for three weeks after the procedure as this can cause bleeding.

You are fine to drive again and you can start doing sport again as soon as you feel fit.



You can also start sexual activity as soon as you feel fit. You are likely to notice blood in your semen or discoloured semen if you ejaculate normally. This is nothing to worry about and will not harm your partner in any way.

Will I need to come back to the hospital?

We will phone you a few days after your procedure to make sure you are ok. If you have any problems we can make a review appointment for you to see us again.

We will ask you to come back after six weeks so we can measure your urine flow rate and how well you can empty your bladder. You may also need to have blood tests. You will have these checks again six months later.

After that time your GP can usually check your progress, although we may ask you to have some tests again.

Urgent enquiries or emergencies

For urgent enquiries after your operation, contact your GP. Out of hours, call **NHS 111**. If it is an emergency, go to your nearest Accident and Emergency (A&E).

Who can I contact with queries and concerns?

For general queries or concerns after your operation, please contact the Day Surgery Centre and ask to speak to the nurse in charge. Tel: **020 3299 3483** or **020 3299 2188**, 7.30am to 7pm, Monday to Saturday.

Sharing your information

We have teamed up with Guy's and St Thomas' Hospitals in a partnership known as King's Health Partners Academic Health



Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas'. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS

Tel: **020 3299 3601**

Email: **kch-tr.palsdh@nhs.net**

You can also contact us by using our online form at

www.kch.nhs.uk/contact/pals

PALS at Princess Royal University Hospital, Farnborough Common, Orpington, Kent BR6 8ND

Tel: **01689 863252**

Email: **kch-tr.palspruh@nhs.net**

If you would like the information in this leaflet in a different language or format, please contact PALS on 020 3299 1844.





