



# Having a blue light cystoscopy

**The aim of this information sheet is to help answer some of the questions you may have about having a blue light cystoscopy. It explains the benefits, risks and alternatives of the procedure as well as what you can expect when you come to hospital. If you have any questions and concerns, please speak to a doctor or nurse caring for you.**

You have already had a cystoscopy or another examination which has shown that you may have an abnormal area or some cancer in your bladder. Your consultant has recommended a blue light cystoscopy to investigate this.

## Your bladder

Your bladder is located in the lower part of your abdomen and temporarily stores your urine. Urine is the waste fluid produced by your kidneys when they clean your blood. As it fills with urine, the muscles of your bladder allow it to expand, rather like a balloon. When your bladder is full, you get the urge to pass urine (urinate). It then leaves your bladder and travels through your urethra (the tube that carries urine to the outside of your body).

## What is a blue light cystoscopy?

A blue light cystoscopy allows your doctor to look inside your bladder during an operation. A chemical called hexyl aminolevulinate (HAL) will be inserted into your bladder. This is done by passing a fine tube (catheter) along your urethra and into the bladder. With a special camera and a blue light, your doctor can then check your bladder. During the operation, cancer cells absorb the chemical and then glow red in the blue light, so they are easier to see.

Please note that you only need one dose of the chemical and this is given one hour before your operation. If you experience any of the following side effects after the dose is given, please tell your doctor or nurse:

- bladder spasm or pain
- pain or burning on passing urine
- headache
- inability to pass urine
- blood in the urine
- nausea.

If you have previously experienced an allergic reaction when given HAL, please let the doctor or nurse know before they give you the drug.

## What are the benefits – why should I have this procedure?

- You may have had some abnormal cells in your urine (urine cytology) and all your other examinations have been normal. Sometimes the blue light cystoscopy can be very helpful to identify areas that might not have been seen by the other examinations performed and to explain why there are abnormal cells in the urine.
- It may be that you have bladder cancer and the surgeon wants to be able to see all the cancer. Blue light cystoscopy can highlight areas that may be difficult to see with the naked eye.

## What are the risks?

Your doctor or nurse will discuss the risks for this procedure with you in more detail before asking you to sign the consent form. Risks include:

- infection
- bleeding
- damage to your bladder lining, such as a tear, which may need further treatment
- difficulty in passing urine after your operation
- complications from general/spinal anaesthetic, such as nausea (please see the leaflet **Having an anaesthetic** for more details about the risks)
- deep vein thrombosis – a blood clot, usually in the large veins in the legs (the stockings we will give you will help to prevent this)
- death – it is important to be aware that this is a risk, although it is extremely rare.

## Are there any alternatives?

Having a normal white light cystoscopy without the chemical is an alternative. The procedure is the same as a blue light cystoscopy (including the use of an anaesthetic, the risks and the follow-up) except for the following:

- there will be no need for a catheter to be inserted as the chemical HAL will not be used
- a white light source is used during the operation instead of a blue light.

## How can I prepare for a blue light cystoscopy?

You will come into hospital either the afternoon before or the morning of your surgery. Most patients can leave hospital within 48 hours of their procedure.

You will have a pre-operative assessment **or** an appointment with the proactive care of older people undergoing surgery (POPS) team within a few weeks of your surgery. It is important that you come to this appointment, as this is when we will assess your suitability for surgery and the anaesthetic. We will also make sure you have had the relevant tests and examinations. If you do not come to this appointment, we may have to cancel your surgery.

If you are taking any medication, these may need to be temporarily stopped or adjusted around the time of your surgery or treatment, you will be given information on how to do this at your pre-assessment appointment. **Do not make any changes to your usual medicines and continue to take them unless you have been advised to do so.** Please remember to bring them into hospital with you.

If you are taking any medicines that thin your blood, such as antiplatelet medicines (for example aspirin or clopidogrel) or anticoagulant medicines (for examples warfarin or rivaroxaban), please tell your doctor or the nurse as you may need to stop them temporarily before your procedure.

Also tell your doctor or nurse if you have diabetes as you may need to alter the dose of your diabetes medicines, as you will need to fast before the procedure.

Please let us know if you are taking any regular medicines (including anything you buy yourself over the counter or any herbal or homeopathic medicines) and if you have any allergies to any medicines. Further information on stopping any medicines will be given to you when you come for your pre-assessment appointment. Please ask us if you have any questions

## Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

## Before the operation

Your consultant or registrar will see you on the night before, or morning of, your operation to discuss the surgery and answer any questions that you may still have.

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. This is because you should not have food or drink in your stomach when you are given the anaesthetic. If you do, you are more likely to be sick while you are unconscious, which can lead to complications. The nursing staff will tell you when you will need to stop eating and drinking.

You will need to provide a small urine sample before your procedure that will be tested for signs of infection. If we find an infection we may postpone your procedure.

Around this time a specialist nurse or doctor will see you to insert the blue light chemical (HAL) in to your bladder. He or she will ask you to empty your bladder before this is done. Once the chemical is in your bladder you should not feel any discomfort and we will ask you to try **not** to pass urine for at least one hour.

An hour before the operation you will put on a gown and some tight-fitting anti-thrombus stockings. These help to prevent blood clots from forming in your legs. A member of the ward staff will then take you to the theatre.

## What happens during the operation?

A blue light cystoscopy is carried out under a general or spinal anaesthetic. A general anaesthetic is medicine that will make you unconscious (asleep) during your operation, so you will not feel any pain.

A spinal anaesthetic involves a special needle being inserted into your back so anaesthetic medication can be injected around the spinal nerves. This numbs the lower half of your body so you will be awake, but will not feel anything from your waist downwards. You can also have sedation with this, which does not put you to sleep, but makes you feel drowsy. Your doctor will discuss the options with you before the operation. For more information please see our leaflet, **Having an anaesthetic** - please ask a member of staff for a copy.

Your doctor will place a slim fibre-optic telescope (cystoscope) up your urethra and into your bladder. This is a special tube that allows your doctor to see your bladder lining. If there are any

growths in the bladder, instruments inserted down the side-channels of the cystoscope will cut them away from the lining of your bladder wall. This can cause some bleeding. Usually a catheter will be left in your bladder afterwards to allow your bladder to empty and to remove any debris, but this may not always be necessary.

## What happens after the procedure?

Occasionally the catheter needs to be kept in for several days. It will be removed when your urine becomes rose-coloured or clear, before you leave hospital. Once the operation is over, a member of staff will take you back to the recovery room to allow the anaesthetic to wear off. You will be taken back to your ward when you are fully awake and the nurses will encourage you to drink plenty of water.

## What do I need to do after I go home?

You will usually be able to go home within 48 hours after your procedure. We advise you to speak to your doctor about how much time you will need off work after your operation. This will depend on your recovery and the type of work that you do. Usually you will need to take about two weeks off, but if your job involves lifting or heavy work, you may need to take three to four weeks off work.

Try to start gentle exercises about a week after your surgery, but please do not do anything too energetic, such as playing contact sports, for a month. You should not start to drive again until you feel comfortable to do so and you can perform an emergency stop. Please check with your insurance provider before starting to drive again.

## What if I have problems at home?

Some people experience a mild burning sensation when passing urine after their surgery. This usually settles after a few days.

### **Please contact your GP or go to your local Emergency Department (A&E) if you:**

- develop a temperature, have pain and persistent burning when you pass urine
- do not pass urine for eight hours (unless you are asleep)
- pass large clots of blood
- have persistent bleeding.

## Will I have a follow-up appointment?

Your results should be available seven to 10 days later. You will have an appointment in the follow-up clinic, where your doctor will be able to review your results and discuss your future care. **Please make sure you have been given an appointment before you leave hospital.**

Your follow-up care will depend on the results from your operation. Your doctor will discuss this with you. If you have had bladder cancer and do not need any further treatment, you will need to have regular cystoscopies to check the cancer has not returned. These will initially be at three-monthly intervals and then less often if your bladder remains cancer-free. If you need further treatment or your tumour(s) return, your doctor will discuss this with you at your follow-up appointment.

## Useful sources of information

### **Macmillan Cancer Support**

**t:** 0808 808 0000 (Monday-Friday, 9am-8pm) **w:** [www.macmillan.org.uk](http://www.macmillan.org.uk)

## Contact us

If you want any further information or any help, do not hesitate to contact the **urology department** for advice. Telephone **020 7188 7636** to speak to one of the bladder cancer clinical nurse specialists, Sue Amery or Kathryn Chatterton. Alternatively ring **020 7188 3026** and ask the operator to bleep **2840** or **1227**. (Monday to Friday, 9am to 5pm)

Outside normal working hours, please call Aston Key Ward on **020 7188 8860** or Florence Ward on **020 7188 8818**.

Guy's and St Thomas' hospitals offer a range of cancer-related information leaflets for patients and carers, available at [www.guysandstthomas.nhs.uk/cancer-leaflets](http://www.guysandstthomas.nhs.uk/cancer-leaflets). For information leaflets on other conditions, procedures, treatments and services offered at our hospitals, please visit **w:** [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)



**Dimbleby Cancer Care** provides cancer support services for Guy's and St Thomas'. We have a drop-in information area staffed by specialist nurses and offer complementary therapies, psychological support and benefits advice for patients and carers.

Dimbleby Cancer Care is located in the Welcome Village of the Cancer Centre at Guy's, **t:** 020 7188 5918 **e:** [DimblebyCancerCare@gstt.nhs.uk](mailto:DimblebyCancerCare@gstt.nhs.uk)

## 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, Monday to Friday, 9am-5pm

## 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](mailto:pals@gstt.nhs.uk)  
**t:** 020 7188 3514 (complaints) **e:** [complaints2@gstt.nhs.uk](mailto: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](mailto:languagesupport@gstt.nhs.uk)

## NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. **t:** 111 **w:** [111.nhs.uk](http://111.nhs.uk)

## NHS website

Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing. **w:** [www.nhs.uk](http://www.nhs.uk)

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