

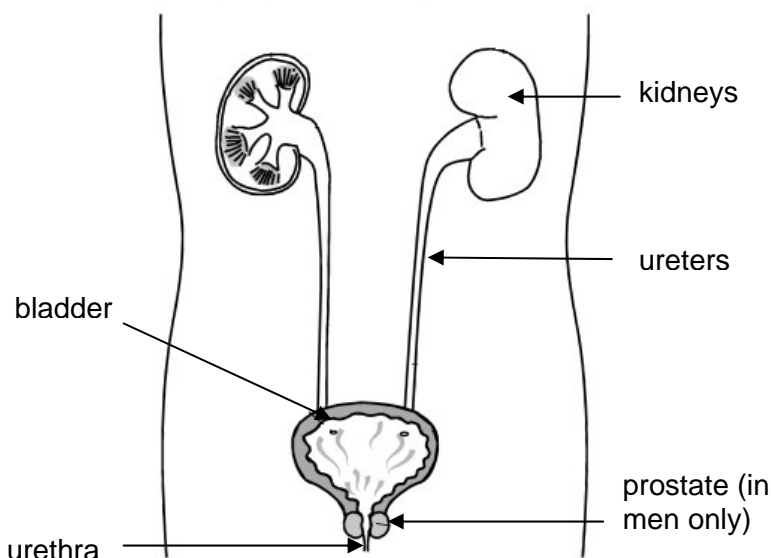
Treatment for bladder tumours under blue light - transurethral resection of a bladder tumour (TURBT)

You have had a cystoscopy or other examination that has shown that you have an abnormal area (tumour) in your bladder. Your consultant has recommended a blue light transurethral resection of your bladder tumour(s) (TURBT) to investigate the type of tumour and treat any tumour(s) present.

This leaflet answers some of the questions you might have about this treatment. It explains the benefits, risks and alternatives to the procedure, as well as what you can expect when you come into hospital. If you have any questions, please speak to your nurse, who will be happy to help you.

Your bladder

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



Pictured above: the urinary system. Diagram copy EMIS and PiP 2006, as distributed on www.patient.co.uk

What is a blue light transurethral resection of a bladder tumour (TURBT)?

A tumour is an abnormal growth of the body's tissue cells and can be classified as benign (not cancer) or malignant (cancer).

A transurethral resection of a bladder tumour or TURBT is a treatment for bladder tumours. The tumour or tumours are cut away from the bladder wall, removed and then sent for examination. From this, your consultant will be able to find out whether the tumour cells are cancerous and, if they are, the grade and stage the cancer has reached. This information can then be used to help decide any future treatment needed.

A blue light TURBT 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. Cancer cells absorb the chemical and then glow red in the blue light during the operation, 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 immediately:

- bladder spasm or pain
- pain or burning on passing urine
- headache
- unable 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 chemical.

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

Blue light TURBT can highlight areas that may be difficult to see with the naked eye. Therefore, using the HAL chemical can help the surgeon to remove all the abnormalities in the bladder.

Why do I need this procedure?

Benign bladder tumours usually grow very slowly. However, if they are not treated, they could become very large and cause problems by taking up too much space in your bladder or pressing on other organs in your body.

Malignant tumours continue to grow unless they are removed. They can invade surrounding tissue and spread to other areas of the body causing further problems.

Cancerous tumours

Bladder cancer occurs most commonly in people between 50 and 70 years of age. It is the fourth most common cancer in men and 13th most common in women in the UK. The most common symptom of bladder cancer is blood in the urine (haematuria). You may also have similar symptoms to having a urine infection, for example pain when you pass urine and the urge to pass urine frequently.

The exact causes of bladder cancer are not known. However, you are more likely to develop bladder cancer if you:

- smoke, as chemicals in tobacco enter the blood stream and are then filtered out by the kidneys. It is thought that these can cause damage to the bladder lining, which can lead to bladder cancer
- have a history of bladder cancer in your family
- previously worked in the dye chemical or print industry - certain chemicals that were used in these industries have been banned as they are now known to cause cancer
- repeated bladder infections, for example cystitis
- previously had bladder cancer
- develop a bladder infection called schistosomiasis, caused by a parasite in certain tropical countries.

What are the alternatives?

Having a standard white light TURBT without the chemical

The procedure is the same as for a blue light TURBT (including anaesthetic, the risks and the (follow-up) except for the following:

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

You may find the leaflet **Treatment for bladder tumours - Trans-urethral resection of bladder tumours (TURBT)** useful. Please ask for a copy.

If malignant tumours recur, we may offer chemotherapy or immunotherapy as a treatment, but a TURBT is the first treatment offered for all bladder tumours.

Asking for your consent

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.

What happens before the operation?

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 should receive the leaflet, **Welcome – information about your stay**, which gives more information about how to get to the hospital, what to bring with you and what to expect during your stay. If you do not receive a copy, ask for one from a member of staff caring for you.

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 pre-assessment. Please ask us if you have any questions

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.

Approximately one hour before the operation a specialist nurse or doctor will ask you to empty your bladder and then the blue light chemical (HAL) will be instilled in to your bladder. 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.

Prior to surgery 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 staff will then take you to the theatre.

Having an anaesthetic

A blue light cystoscopy is carried out under a general or spinal anaesthetic. A **general anaesthetic** will make you unconscious (asleep) during your operation, so you will not feel any pain. It is given through a small injection into the back of your hand. A specially-trained medical doctor called an anaesthetist will stay with you and monitor you during your surgery.

A **spinal anaesthetic** is where a special needle is inserted into your back and anaesthetic medication is injected around the spinal nerves. This makes the lower part of your body completely numb, so you are unable to feel anything but you remain awake.

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.

Our leaflet **Having an anaesthetic** gives more information and outlines the risks. If you do not have a copy, please ask us for one.

During the operation

When you are anaesthetised your doctor will place a slim fibre-optic telescope (cystoscope or resectoscope) up your urethra and into your bladder. This is a special tube that allows your doctor to see your bladder lining. The visible tumour(s) will be cut away from the lining of your bladder wall using instruments inserted down the side-channels of the resectoscope. This can cause some bleeding. Once a tumour has been removed, any bleeding is prevented or reduced by using a mild electric current to cauterise (burn) the area where the tumour was.

If there is a lot of bleeding, you may have a fine tube (catheter) inserted into your bladder to allow your bladder to empty and to remove any debris. Occasionally the catheter needs to be kept in for several days if the bleeding is persistent. It will be removed when your urine becomes rose-coloured or clear, before you leave hospital.

Depending on the size of your tumour(s), the operation may take between 15 minutes and an hour. The tumour(s) will then be sent for examination. Once the operation is over, you will be taken to the recovery room to allow the anaesthetic to wear off. You will be taken back to the ward when you are fully awake and the nurses will encourage you to drink plenty of water.

What are the risks?

Although serious complications are rare, every surgical procedure has risks. Your doctor or nurse will discuss the specific risks for this procedure with you in more detail before asking you to sign the consent form.

Risks include:

- complications from general/spinal anaesthetic, such as nausea
- blood in the urine – this is common (in more than one in 10 people) and you may experience a mild burning sensation when passing urine for a couple of days after your operation. You will be encouraged to drink plenty of water to keep hydrated and flush your system.
- infection – this happens occasionally (in between one in 10 and one in 50 people). You will be given antibiotics to treat the infection if this occurs.
- perforation of the bladder - this is rare (in less than one in 50 people) and will need a temporary urinary catheter or open surgical repair.
- difficulty in passing urine directly after the operation – this is rare as most patients have a catheter for the first 24 hours after surgery.
- deep vein thrombosis (a blood clot, usually in the large leg veins). The stockings you are given will help to prevent this, and you may also have an injection – the doctors will assess you and discuss this with you if it is necessary.
- death is extremely rare, although a potential risk with any general anaesthetic procedure.

When can I go back to my normal activities?

You will usually be able to go home within 48 hours of 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.
- 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.
- not to drive again until you feel comfortable and are able to 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 on passing urine after their surgery. This usually settles after a few days. **However, please contact the urology ward, your GP or go to your local emergency (A&E) department if you:**

- develop a temperature (over 38°C), 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
- if you have persistent bleeding.

Your results

Your results should be available 10–14 days later. You will have an appointment in the bladder cancer clinic on a Friday morning, where your doctor will be able to review your results and discuss your future care. Please make sure you have been given this appointment before you leave hospital after your operation.

The results from your blue light TURBT will determine your future follow-up. Your doctor will discuss this with you when you come for your follow-up appointment.

If you have bladder cancer and do not need any further invasive 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 progressively 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.

Cancer support organisations

Macmillan Cancer Support provides information and support to anyone affected by cancer.
t: 0808 808 00 00 **w:** www.macmillan.org.uk

Cancer Research UK has a patient information website, with information on all types of cancer and treatment options, as well as a book list for further information.
t: 0808 800 4040 **w:** www.cancerhelp.org.uk



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

Contact us

If you want any further information or any help, do not hesitate to contact the urology department. Ring 020 7188 7636 to speak to the bladder cancer clinical nurse specialists, Monday to Friday, 9am to 5pm. Alternatively, ring switchboard on 020 7188 7188 and ask the operator to bleep 2840 or 1227. Out of hours 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. For information leaflets on other 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 clinical nurse specialist or other member of 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 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

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

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership

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