



TRANSURETHRAL TELESCOPIC RESECTION OF A BLADDER TUMOUR

Information about your procedure from
The British Association of Urological Surgeons (BAUS)

This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.

To view the online version of this leaflet, type the text below into your web browser:

[http://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Bladder tumour resection.pdf](http://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Bladder%20tumour%20resection.pdf)

Key Points

- A bladder tumour is one of the commonest causes of haematuria (blood in your urine)
- Bladder tumours are resected (shaved) off the bladder wall using a telescope put into your bladder through your urethra (waterpipe)
- The removed fragments of tissue are sent for pathology analysis to see whether the tumour is cancerous, and to assess how deeply the tumour has grown into the wall of your bladder
- Some patients may need additional treatment (with chemotherapy, radiotherapy or further surgery)
- Most patients need periodic follow-up with further telescopic bladder examinations

What does this procedure involve?

Removal of a bladder tumour (growth) from your bladder using diathermy (electrical current) or laser energy, through a telescope passed into your bladder along your urethra (waterpipe)

What are the alternatives?

- **Radiotherapy** – external beam radiotherapy given as a series of treatments to your bladder may be appropriate for some tumours
- **Chemotherapy** – using drugs instilled into the bladder (for early bladder cancer) or given intravenously (for more advanced cancer)

- **Surgical removal of your bladder** – using open, laparoscopic (keyhole) or robotic-assisted techniques may be an option for more advanced tumours

What happens on the day of the procedure?

Your urologist (or a member of their team) will briefly review your history and medications, and will discuss the surgery again with you to confirm your consent.

An anaesthetist will see you to discuss the options of a general anaesthetic or spinal anaesthetic. The anaesthetist will also discuss pain relief after the procedure with you.

We may provide you with a pair of TED stockings to wear, and we may give you a heparin injection to thin your blood. These help to prevent blood clots from developing and passing into your lungs. Your medical team will decide whether you need to continue these after you go home.

Details of the procedure

- we carry out the procedure either under a general anaesthetic (where you will be asleep) or under a spinal anaesthetic (where you will feel nothing from your waist down)
- we usually give you an injection of antibiotics before the procedure, after you have been checked for any allergies
- we put a telescope through your urethra (waterpipe) into the bladder to see the tumour (pictured)
- using diathermy (electric current) or laser energy, we resect (shave) the tumour off the bladder wall, piece by piece
- we stop any bleeding by cauterising the tumour base with diathermy or a laser
- we remove the fragments from your bladder using suction and send them for pathology analysis
- we normally put a bladder catheter through your urethra with irrigation to prevent any blood clots from forming
- we use the catheter to instil a Mitomycin C (an anti-cancer drug) into your bladder immediately after the procedure; this is left in your bladder for one hour and then drained away













- the procedure takes between 15 minutes and 90 minutes to perform, depending on the size and number of tumours in your bladder
- you can expect to stay in hospital for one to three days

A short [video of resection of a bladder tumour](#) is available on the BAUS website.

Are there any after-effects?

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon's advice about the risks and their impact on you as an individual:

After-effect	Risk
Mild burning with blood in your urine for a short time after the procedure	 Almost all patients
Need for additional treatment to prevent later tumour recurrence (e.g. Mitomycin C instillation)	 Almost all patients
Infection in your bladder requiring antibiotic treatment	 Between 1 in 10 & 1 in 50 patients
No guarantee of cancer cure by this procedure alone	 Between 1 in 10 & 1 in 50 patients
Recurrence of the tumour and/or incomplete removal	 Between 1 in 10 & 1 in 50 patients
Delayed or ongoing bleeding requiring further surgery to remove blood clots	 Between 1 in 50 & 1 in 250 patients
Damage to the ureters (the tubes that drain urine for your kidneys to your bladder) requiring further treatment	 Between 1 in 50 & 1 in 250 patients

Injury to your urethra resulting in delayed scar formation and a urethral stricture	 Between 1 in 50 & 1 in 250 patients
Perforation of your bladder requiring a temporary bladder catheter or open surgical repair	 Between 1 in 50 & 1 in 250 patients
Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)	 Between 1 in 50 & 1 in 250 patients (your anaesthetist can estimate your individual risk)

What is my risk of a hospital-acquired infection?

Your risk of getting an infection in hospital is approximately 8 in 100 (8%); this includes getting *MRSA* or a *Clostridium difficile* bowel infection. This figure is higher if you are in a “high-risk” group of patients such as patients who have had:

- long-term drainage tubes (e.g. catheters);
- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

What can I expect when I get home?

- you will get some some bleeding and blood clots in your urine which can last several days
- you may find passing urine uncomfortable at first; simple painkillers such as paracetamol will help with this
- you will tend to feel tired and “washed out”
- you may get some discharge of blood from your urethra, especially if it was necessary to “stretch” your urethra to insert the telescope
- you may get further bleeding up to three weeks after the initial blood loss has stopped; this is known as **secondary haemorrhage** and is often due to infection in your bladder
- if the bleeding stops you from passing urine, you should contact your GP or urologist immediately, or go to your local A&E Department
- you will be given advice about your recovery at home
- you will be given a copy of your discharge summary and a copy will also be sent to your GP

- any antibiotics or other tablets you may need will be arranged & dispensed from the hospital pharmacy
- the fragments of bladder tumour will be examined under a microscope and the results discussed in a multi-disciplinary team (MDT) meeting
- we will inform you and your GP of the result and will arrange to review you to discuss whether further treatment is needed

Is there any way I can prevent post-operative problems?

Yes, there are several measures that will help:

- **Drink plenty of fluid** - you should aim to drink at least two litres daily for the first two or three days. This will dilute your urine and reduce the any discomfort when you pass urine. It also helps to keep the bladder flushed, so that blood clots are less likely to develop and the urine continues to flow easily
- **Take paracetamol** - unless there is a medical reason why you should not). For the first 24 to 48 hours, this will help to make passing urine more comfortable
- **Take your antibiotics** - if you have been given a course of antibiotics to take home with you, you must complete the course
- **Try to stay active** - resuming normal activities as soon as you feel able will speed your recovery. You may find you need slightly more sleep than usual for the first few days after your discharge.
- **Watch out for urine infection** - even if there is blood in your urine, it is unlikely that any discomfort in passing urine is due to infection. If you develop a fever (over 37.5°C), or if your urine becomes cloudy and thick, you could have an infection. You should contact your GP so that he/she can decide whether you need antibiotics.

If you find it very painful to pass clots or cannot pass urine at all, you should contact your GP straight away. If you are unable to contact your GP, telephone your urology specialist nurse (during office hours) or the urology ward of your local hospital (outside normal working hours).

General information about surgical procedures

Before your procedure

Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);

- a regular prescription for a blood thinning agent (warfarin, aspirin, clopidogrel, rivaroxaban or dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

Questions you may wish to ask

If you wish to learn more about what will happen, you can find a list of suggested questions called "[Having An Operation](#)" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home

We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.

We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

Smoking and surgery

Ideally, we would prefer you to stop smoking before any procedure. Smoking can cause cancers of the urinary tract, encourage existing cancers to recur or progress, and increase the risk of complications after surgery. We strongly advise anyone with bladder cancer to stop smoking. For advice on stopping, you can:

- contact your GP;
- access your local [NHS Smoking Help Online](#); or
- ring the free NHS Smoking Helpline on **0800 169 0 169**.

Driving after surgery

It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to [contact the DVLA](#) if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

What should I do with this information?

Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

What sources have we used to prepare this leaflet?

This leaflet uses information from consensus panels and other evidence-based sources including:

- the [Department of Health \(England\)](#);
- the [Cochrane Collaboration](#); and
- the [National Institute for Health and Care Excellence \(NICE\)](#).

It also follows style guidelines from:

- the [Royal National Institute for Blind People \(RNIB\)](#);
- the [Information Standard](#);
- the [Patient Information Forum](#); and
- the [Plain English Campaign](#).

Disclaimer

We have made every effort to give accurate information but there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

PLEASE NOTE

The staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you do have any questions, you should contact your urologist, specialist nurse or GP.