



## HOLMIUM LASER INCISION of the BLADDER NECK (HoLBNI)

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.



<http://rb.gy/92tl1>

To view this leaflet online, scan the QR code (right) or type the short URL below it into your web browser:

### KEY POINTS

- Holmium laser bladder neck incision (HoLBNI) involves making a cut through the neck of your bladder using a laser fibre passed through a telescope along your urethra (waterpipe)
- You will have a catheter in your bladder draining urine for 24 hours after the operation
- It is very effective at improving your symptoms of bladder outflow obstruction (including poor urinary flow and incomplete bladder emptying)
- It can affect your ejaculation with approximately 4 out of 10 men having retrograde ejaculation afterwards ("dry" orgasms)

### What does this procedure involve?

The procedure involves cutting through the neck of your bladder to allow you to pass urine more easily and with a better stream.

### What are the alternatives?

- **Observation** – no treatment, but monitoring of any change in your symptoms; symptoms can improve over time without any treatment
- **[Drugs to improve urine flow](#)** – by relaxing the thickened muscle at the neck of your bladder e.g. tamsulosin, doxazosin, terazosin

- [Bladder neck incision using non-laser energy](#) – some surgeons prefer to cut the bladder neck with an electric “spike” rather than a laser
- [Transurethral prostatectomy \(TURP\)](#) – we may choose to do this instead of, or in addition to, a BNI if it is felt necessary to relieve your symptoms

## What happens on the day of the procedure?

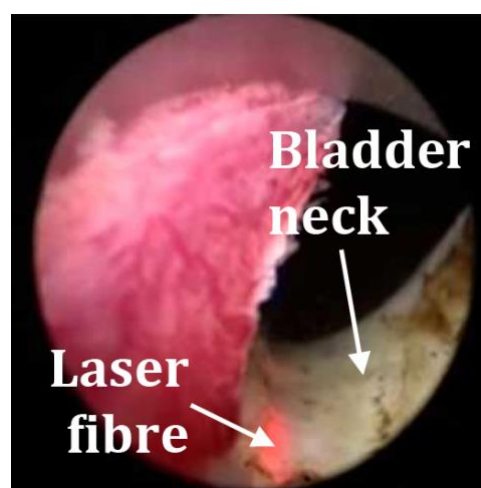
Your urologist (or a member of their team) will briefly review your history and medications, and will discuss the surgery again with you to confirm your consent.

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 normally use either a general anaesthetic (where you are asleep) or a spinal anaesthetic (where you are unable to feel anything 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 into your bladder through the urethra (water pipe) to check that there are no other problems within your bladder
- we use a laser fibre to cut through the thickened muscle at the neck of the bladder (pictured)
- occasionally, we may feel it necessary to remove some prostate tissue as well, to make sure that the urinary channel remains clear and open
- we put a catheter into your bladder at the end of the procedure



- we normally use bladder irrigation through the catheter to flush out any clots or bleeding
- on average, the procedure takes 20 to 30 minutes to complete





We usually remove your bladder catheter after one night. You may find it painful to pass urine at first and it may come more frequently than normal. Tablets or injections can help with this, and it usually improves within a few days.



Your urine may turn bloody for 24 to 48 hours after removal of your catheter and some patients cannot pass urine at this stage. If this happens, we put another catheter in, before removing it again 48 hours later.

You will normally be in hospital for 1 to 2 nights.

### 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
Temporary mild burning, bleeding and frequent urination	 Almost all patients
Urinary tract infection requiring treatment with antibiotics	 Between 1 in 2 & 1 in 10 patients
No semen is produced because it passes back into your bladder on ejaculation (retrograde ejaculation)	 Between 1 in 2 & 1 in 10 patients
Failure to relieve your symptoms completely	 Between 1 in 50 and 1 in 100

Injury to the urethra causing delayed scar formation	 Between 1 in 100 & 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 between 4 & 6%; 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);
- long hospital stays; or
- multiple hospital admissions.

## What can I expect when I get home?

- 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
- you should drink twice as much fluid as you would normally for the first 24 to 48 hours, to flush your system through and reduce the risk of infection
- you may return to work when you are comfortable enough and when your GP is satisfied with your progress
- one patient in five (20%) gets some bleeding 10 to 14 days after getting home, due to scabs separating from the cavity of the prostate. If this happens, you should increase your drinking; if it does not settle, you should contact your GP who may prescribe antibiotics for you
- if you have a fever, severe pain on passing urine, worsening bleeding, passing blood clots or sudden difficulty passing urine, you should contact your GP immediately; this may require re-admission as an emergency

## 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 (e.g. warfarin, aspirin, clopidogrel, rivaroxaban, 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.

You will also be informed of any follow-up and further treatment that may be required.

### *Smoking and surgery*

Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;

- access your local [NHS Smoking Help Online](#); or
- ring the Smoke-Free National Helpline on **0300 123 1044**.

### ***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.

### **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**

Whilst we have made every effort to give accurate information, 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 have any questions, you should contact your Urologist, Specialist Nurse or GP in the first instance.