DIAGNOSTIC URETEROSCOPY (TELESCOPIC SURGERY TO INVESTIGATE THE URETER & KIDNEY)

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/Diagnostic ureteroscopy.pdf

Key Points

- The aim of this procedure is to examine your bladder, ureter (the tube that drains urine from the kidney into the bladder) and kidney using a thin telescope passed through your urethra (waterpipe)
- We use a "semi-rigid" telescope (ureteroscope) to examine your ureter and a flexible uretero-renoscope to examine your kidney
- Sometimes a biopsy (tissue sample) may be taken for analysis, and a laser fibre may be used to destroy an abnormality that is found
- The procedure is normally used to provide information in addition to that obtained from scans e.g. CT scanning

What does this procedure involve?

This involves using a telescope (semi-rigid or flexible) passed into your bladder through your urethra (waterpipe) to look at the your ureter and/or kidney. We sometimes need to leave a temporary stent in your ureter after the procedure.

What are the alternatives?

- **Observation** – sometimes with a repeat CT scan using contrast medium (dye) instead of looking directly into the ureter and kidney

- **Percutaneous nephroscopy** – is sometimes necessary to look directly into the kidney by puncturing the kidney through the skin, but this would only be in exceptional circumstances

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.

Your imaging will be reviewed by the team to make sure they know which kidney they intend to inspect if only one side is being examined.

Details of the procedure

- we normally use a full general anaesthetic and you will be asleep throughout the procedure
- 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 your urethra (waterpipe), and use it to pass a guidewire up into your kidney, using X-ray control.
- we then pass the ureteroscope (semi-rigid or flexible) up the full length of your ureter into the kidney.
- we may take a biopsy using either a tiny pair of forceps or a specially designed "basket" passed through the telescope
- if any abnormality is found, we may use a laser (normally used to break kidney stones) to destroy it
- we often insert a temporary drainage tube (a ureteric catheter or a stent with a string attached) into the ureter at the end of the procedure; we normally remove itr on the first post-operative morning but, sometimes, it needs to stay in for a week or two
- occasionally, we need to perform a "second-look" ureteroscopy at a later date if we fail to reach the kidney at the initial procedure; if this is the case, we leave a stent in your ureter until the second procedure

- occasionally, we put in a bladder catheter which is removed the following morning
- most patients go home on the same day as their procedure, or early on the first post-operative morning
- if an abnormality is found, you may be advised to have this procedure on a regular basis in case the abnormality grows again; it is perfectly safe to perform ureteroscopy repeatedly.

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. The impact of 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 or bleeding on passing urine for a short time after the procedure (especially if you have a ureteric stent)	 Almost all patients
Temporary insertion of a ureteric stent which needs to be removed later	 Almost all patients
Failed to access the ureter requiring further surgery or other treatment	 1 in 20 patients (5%)
Temporary insertion of a bladder catheter	 Between 1 in 10 & 1 in 50 patients
Infection requiring antibiotic treatment	 Between 1 in 50 & 1 in 100 patients
Minor damage to the wall of the ureter (small perforation, mucosal abrasion, bleeding) requiring stenting or percutaneous nephrostomy	 1 in 100 patients (1%)
Narrowing of the ureter due to delayed scar formation (stricture) which may require further treatment	 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)
Major damage to the wall of the ureter (large perforation, avulsion of the ureter) requiring further surgery		Less than 1 in 1000 patients (less than 0.1%)

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 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
- recovery from uretero-renoscopy is usually rapid; you may return to work when you are comfortable enough and when your GP is satisfied with your progress
- if you have had a stent put in, you may get pain in your kidney area when you pass urine, or in your bladder; this usually settles quickly but, if you feel unwell or feverish, you should contact your GP to check for a urine infection
- if you develop a fever, pain in the area of the affected kidney, severe pain on passing urine, inability to pass urine or worsening bleeding, you should contact your GP immediately

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 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 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.