ENDOPYELOTOMY
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:

KEY POINTS

- Endopyelotomy is a procedure performed to relieve a blockage at the junction between your kidney and ureter, just below the kidney
- Nowadays, it is used only occasionally, when all other methods seem inappropriate
- We put a stent in your ureter at the end of the procedure; this is usually removed after a few weeks.
- Some imaging is usually performed after a few weeks to ensure the kidney is draining satisfactorily and safely after the procedure.

What does the procedure involve?
This involves passing a small telescope up to the narrowed area between your kidney and ureter (the pelvi-ureteric junction, PUJ), either by puncturing the kidney (percutaneously) or from below, through the bladder, to cut through the narrow area.

What are the alternatives?

- Observation – if your kidney function is stable and you are not getting too much pain, sometimes no intervention is necessary and we may simply monitor the situation
- Laparoscopic or robotic pyeloplasty - reconstructing the join between your kidney and ureter using keyhole surgery
• **Open pyeloplasty** – reconstructing the join between your kidney and ureter using open surgery

**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 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 put a fine guidewire up to your kidney under X-ray control
- we then pass a fine telescope to the area of narrowing through which we use a laser or heated wire to cut through the ureter at the junction with the kidney.
- we almost always insert a temporary stent (drainage tube) between your kidney and bladder at the end of the procedure.
- you can expect to be in hospital for one night after the procedure.

We usually remove your stent under local anaesthetic two to four weeks after the procedure. After this, we arrange some further imaging (X-rays or scans) to check the operation has been successful and that the kidney is draining satisfactorily.

**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 listed some very rare but important after-effects (occurring in less than 1 in 250 patients) individually. 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:

<table>
<thead>
<tr>
<th>After-effect</th>
<th>Risk</th>
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<tbody>
<tr>
<td>Need for further reconstructive surgery</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<td>Placement of a urinary catheter for a night or two</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<tr>
<td>The presence of noticeable blood in the urine for a week or so</td>
<td>Between 1 in 5 &amp; 1 in 20 patients</td>
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<tr>
<td>Sepsis (infection) requiring a delayed discharge</td>
<td>Between 1 in 10 &amp; 1 in 50 patients (2 to 10%)</td>
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<tr>
<td>Failure to obtain satisfactory access to your kidney requiring further surgery or alternative treatment</td>
<td>Between 1 in 50 &amp; 1 in 100 patients (1 to 2%)</td>
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<td>Anaesthetic or cardiovascular problems possibly requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, compartment syndrome, heart attack)</td>
<td>Between 1 in 50 &amp; 1 in 250 patients (your anaesthetist can estimate your individual risk)</td>
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**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 a little more fluid as you would normally for the first 24 to 48 hours, to flush your system through and reduce the risk of infection or blockage of your urine flow by blood clots
• we will give you a date to have your stent out and will arrange for some further imaging after the procedure.
• you may return to work when you are comfortable enough and when your GP is satisfied with your progress, usually within seven days; recovery may be slightly longer if your job is physically demanding
• 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)](https://www.gov.uk/government);  
• the [Cochrane Collaboration](https://www.cochrane.org); and  
• the [National Institute for Health and Care Excellence (NICE)](https://www.nice.org.uk).  

It also follows style guidelines from:

• the [Royal National Institute for Blind People (RNIB)](https://www.rnib.org.uk);  
• the [Information Standard](https://www.information-standard.org.uk);  
• the [Patient Information Forum](https://www.patientinformationforum.org); and  
• the [Plain English Campaign](https://www.plainenglish.org).
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.