DISTAL URETHROPLASTY

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.

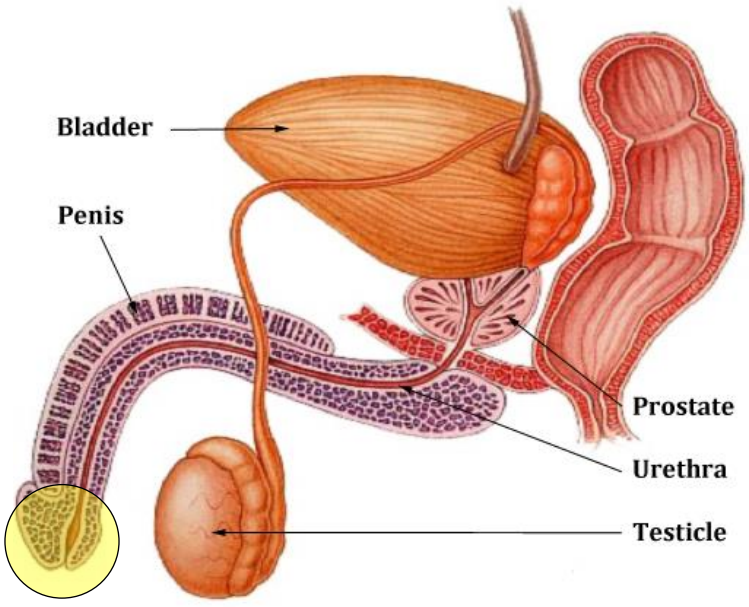
Further, general information about strictures can be found in the leaflet Urethral Stricture Disease.

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/Distal urethroplasty.pdf

Key Points

- Strictures of the distal urethra (circled below) are usually repaired as a two-stage procedure but they can be repaired in a single stage
- Reconstruction involves insertion of a "free graft", usually from the inside of the cheek (buccal mucosa graft)
- Both a suprapubic and urethral catheter may be put in after the procedure
- Distal urethroplasty will generally be performed only in a specialist tertiary referral centre



What does this procedure involve?

We perform distal urethroplasty to treat a stricture at the tip of the penis or just inside the penile urethra (waterpipe). A stricture at this site is usually caused by a condition called **lichen sclerosus** (also known as **balanitis xerotica obliterans** or BXO). This is a progressive, but benign, inflammatory condition of the skin which scars your foreskin but can also cause narrowing at the tip of your urethra. Other causes of strictures at this site include trauma, repeated passage of instruments or catheters and previous surgery such as operations for hypospadias in childhood.

Before agreeing to have the procedure, you may be asked to have a urethrogram. This is an X-ray that shows all your urethra and assesses the length of the stricture. It is done by placing a very fine catheter inside the tip of your urethra and injecting contrast medium (a dye that shows up on X-ray) whilst X-rays are taken.

In some centres, a urethral ultrasound scan is preferred to demonstrate the urethral stricture. Lubricant jelly is applied to your penis and you are asked to pass urine so that the urethral anatomy can be seen clearly. These tests help show that the problem is localised just at the tip of your penis.

What are the alternatives?

- **Observation** - "doing nothing"
- **Meatotomy** – widening of the opening by making a simple incision on the underside of your penis (now rarely performed)
- **Meatoplasty** – a long incision where the edges of your urethra are stitched to the skin of your penis; this may not be appropriate if you have significant BXO
- **Dilatation** – repeated stretching using plastic or metal dilators which you may need to continue yourself (intermittent self-dilatation)

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 give you a heparin injection to thin your blood. These help to prevent blood clots from

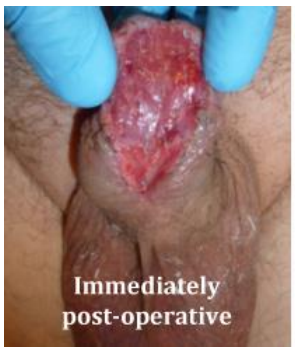
developing and passing into your lungs. Your medical team will decide whether you need to continue these after you go home.

Details of the operation

We usually perform the procedure in two stages. Each stage requires a separate admission and operation:

The first stage of a two-stage procedure

- we usually carry out the procedure under a general anaesthetic
- we usually give you an injection of antibiotics before the procedure, after you have been checked for any allergies
- we open your urethra along its underside, from its tip right back to normal urethra further down the penis
- we remove all the unhealthy scar tissue
- we take a graft of buccal mucosa (the lining of the inside of your cheek and sew it into the area where the urethra used to be
- we put in a urethral or suprapubic catheter which needs to stay in place for one to three weeks



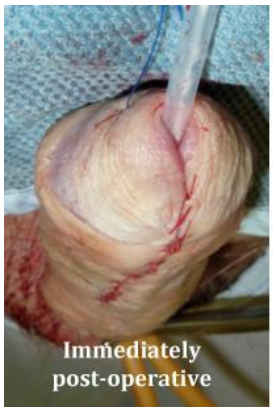
- your mouth wound will heal very quickly; some surgeons stitch the mouth defect whilst others leave it to heal on its own
- the head of your penis will look flattened (like a “hammerhead shark”); it will look very bruised and swollen but this will settle over the next two to three weeks
- we normally arrange to change your dressing after five to seven days
- you should expect to be in hospital for one to two nights
- we will arrange to see you in the outpatient clinic after two to three months to discuss the second stage procedure

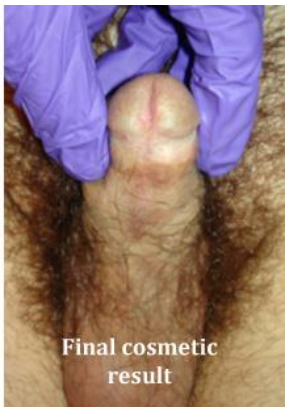
The second stage of a two-stage procedure

Your urologist will discuss whether you should proceed with the second stage of the procedure. If you agree to proceed, the risks & benefits of the procedure will be discussed.

- we sew the grafted area into a cylinder shape to form a new urethra
- we cover this using a thin layer of supporting tissue and close the skin with absorbable stitches that normally disappear with ten to 14 days

- we aim to give you a cylindrical urethra with a vertical slit at the tip of the penis
- we may put in a suprapubic catheter and a small splint or catheter in the tip of your penis
- we will arrange for your catheter to be removed after two to three weeks
- you should expect to be in hospital for one to two nights





Single-stage reconstruction
This procedure combines the first and second stages (described above) into a single operation. We only do this after careful assessment of your general health, any previous surgery, the anatomy of your penile tip and the expertise of your urologist. It is a relatively new technique and, as yet, we do not know the long-term results.

Your urologist can tell you whether one-stage reconstruction is appropriate for you, give you more information about the technical aspects of the procedure and let you know which hospitals can carry out this procedure.

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
Discomfort or numbness in the mouth where the buccal mucosa graft was taken from the inside of the cheek	 Between 1 in 2 & 1 in 10 patients
Recurrent stricture formation requiring further surgery or other treatment	 Between 1 in 2 & 1 in 10 patients

Swelling & bruising of the wound site		Between 1 in 2 & 1 in 10 patients
Failure of the graft or procedure requiring further treatment		Between 1 in 10 & 1 in 50 patients
Wound infection requiring treatment with antibiotics		Between 1 in 10 & 1 in 50 patients
Failure of the urethra to join completely resulting in urine leakage around the stitch line (fistula)		Between 1 in 10 & 1 in 50 patients
Altered or absent erections as a result of injury or surgery to the urethra		Between 1 in 10 & 1 in 50 patients
Dribbling after passing urine (due to “bagginess” of the graft)		Between 1 in 10 & 1 in 50 patients
Shortening of the penis		Between 1 in 10 & 1 in 50 patients
Urinary tract infection requiring antibiotics		Between 1 in 10 & 1 in 50 patients
Pain on sexual intercourse with reduced ejaculation		Between 1 in 50 & 1 in 250 patients
Wound breakdown requiring further surgery		Between 1 in 50 & 1 in 250 patients
Persistence of stitch material		Between 1 in 50 & 1 in 250 patients

Spraying of urine		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?

- we will give you advice about your recovery at home
- we will show you how to manage your catheter
- we will make arrangements for catheter supplies to be delivered to you, if required
- we will arrange a date and venue for your catheter to be removed
- you will be given a copy of your discharge summary and a copy will also be sent to your GP
- any antibiotics, tablets or mouthwashes you may need will be arranged & dispensed from the hospital pharmacy
- we will arrange a follow-up appointment for you

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.

BAUS runs a national audit and collects data from all urologists undertaking this surgery. There are two reasons for this. First, surgeons are required by the Department of Health to look at how well the surgery is being done under their care and, second, to look at national trends for the procedure.

Some basic patient data (e.g. name, NHS number and date of birth) are entered and securely stored. This is required so that members of the clinical team providing your care can go back to the record and add follow-up data such as length of stay or post-operative complications. This helps your surgeon to understand the various outcomes of the procedure.

Although BAUS staff can download the surgical data for analysis, they **cannot** access any patient identifiable data. This information is used to generate reports on individual surgeons and units; these are available for the public to view in the Surgical Outcomes Audit section of the BAUS website.

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.