Open pyeloplasty

What is the evidence base for this information?
This leaflet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence based sources; it is, therefore, a reflection of best practice in the UK. It is intended to supplement any advice you may already have been given by your urologist or nurse specialist as well as the surgical team at Addenbrooke’s. Alternative treatments are outlined below and can be discussed in more detail with your urologist or specialist nurse.

What does the procedure involve?
This involves repair of narrowing or scarring at the junction of the ureter with the kidney pelvis (the pelvi-ureteric junction) and insertion of a temporary stent or kidney drainage tube to aid healing.

What are the alternatives to this procedure?
Observation, telescopic incision, dilatation of the area of narrowing, temporary placement of a plastic tube through the narrowing, laparoscopic (telescopic or minimally invasive) repair.

What should I expect before the procedure?
You will usually be admitted on the same day as your surgery. You will normally undergo pre assessment on the day of your clinic or an appointment for pre assessment will be made from clinic, to assess your general fitness, to screen for the carriage of MRSA and to perform some baseline investigations. After admission, you will be seen by members of the medical team which may include the consultant, junior urology doctors and your named nurse.

You will be asked not to eat or drink for six hours before surgery and, immediately before the operation, you may be given a pre-medicating by the anaesthetist which will make you dry-mouthed and pleasantly sleepy.

You will be given an injection under the skin of a drug (dalteparin), which, along with the help of elasticated stockings provided by the ward, will help prevent thrombosis (clots) in the veins.

Please be sure to inform your urologist in advance of your surgery if you have any of the following:

- an artificial heart valve
- a coronary artery stent
- a heart pacemaker or defibrillator
- an artificial joint
• an artificial blood vessel graft
• a neurosurgical shunt
• any other implanted foreign body
• a prescription for warfarin, aspirin rivaroxaban, dabigatran, apixaban or clopidogrel (Plavix®)
• a previous or current MRSA infection
• high risk of variant CJD (if you have received a corneal transplant, a neurosurgical dural transplant or previous injections of human derived growth hormone)

**What happens during the procedure?**

Normally, a full general anaesthetic will be used and you will be asleep throughout the procedure. In some patients, the anaesthetist may also use an epidural anaesthetic which improves or minimises pain post operatively.

The kidney is usually approached through an incision in your loin although, on occasions, the incision is made in the front of the abdomen.

After exposing the kidney through ‘keyhole’ incisions, the surgeon will divide or remove the blockage at the junction between kidney and ureter. The kidney will then be joined to the ureter again so that drainage can occur (pictured below). Occasionally, a flap of tissue from the kidney may be folded down to widen the narrowing.

A bladder catheter is normally inserted post operatively, to monitor urine output, and a drainage tube is usually placed through the skin into the bed of the kidney.
It is normal to insert either a second drainage tube into the kidney itself or a ureteric stent to allow healing of the reconstruction.

What happens immediately after the procedure?
It is fine, and in fact you will be encouraged, to eat and drink as soon as you feel able to after surgery. You will be encouraged to mobilise as soon as possible after surgery.

This helps to prevent blood clots forming in your legs, chest infection from developing, and also decreases any disturbance to your bowel function.

The catheter is normally removed when you are mobile and the wound drain the following day.

The expected hospital stay is three days. Some patients are able to go home earlier.

Are there any side-effects?
Most procedures have a potential for side-effects. You should be reassured that, although all these complications are well-recognised, the majority of patients do not suffer any problems after a urological procedure.

Please use the check boxes to tick off individual items when you are happy that they have been discussed to your satisfaction:

**Common (greater than one in 10)**
- ☐ Temporary insertion of a bladder catheter and wound drain
- ☐ Further procedure to remove ureteric stent, usually under a local anaesthetic
- ☐ Bulging of the wound due to damage to the nerves serving the abdominal wall muscles

**Occasional (between one in 10 and one in 50)**
- ☐ Bleeding requiring further surgery or transfusions
- ☐ Entry into the lung cavity requiring insertion of a temporary drainage tube

**Rare (less than one in 50)**
- ☐ Recurrent kidney or bladder infections
- ☐ Recurrence can occur needing further surgery
Anaesthetic or cardiovascular problems possibly requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack)

Need to remove kidney at later time because of damage caused by recurrent obstruction.

Infection, pain or hernia of incision requiring further treatment

What should I expect when I get home?
When you leave hospital, you will be given a discharge summary of your admission. This holds important information about your inpatient stay and your operation. If, in the first few weeks after your discharge, you need to call your GP for any reason or to attend another hospital, please take this summary with you to allow the doctors to see details of your treatment. This is particularly important if you need to consult another doctor within a few days of your discharge.

It will be at least 14 days before healing of the wound occurs but it may take up to six weeks before you feel fully recovered from the surgery. You may return to work when you are comfortable enough and your GP is satisfied with your progress.

It is advisable that you continue to wear your elasticated stockings for 14 days after your discharge from hospital.

Many patients have persistent twinges of discomfort in the loin wound which can go on for several months.

After surgery through the loin, the wall of the abdomen around the scar will bulge due to nerve damage. This is not a hernia but can be helped by strengthening up the muscles of the abdominal wall by exercises.

What else should I look out for?
If you develop a temperature, increased redness, throbbing or drainage at the site of the operation, please contact your GP. Any other post-operative problems should also be reported to your GP, especially if they involve chest symptoms or a recurrence of your loin pain.

Are there any other important points?
A follow up outpatient appointment will normally be arranged for you six to 12 weeks after the operation. If a ureteric stent has been inserted, this will normally be removed in the day surgery unit under local anaesthetic after six weeks or so.

To assess the effectiveness of the operation, a radioisotope scan and a further kidney x-ray will normally be arranged for you, six weeks and six months respectively after surgery.

Driving after surgery
It is your responsibility to ensure that you are fit to drive following your surgery.

You do not normally need to notify the DVLA unless you have a medical condition that will last for longer than three months after your surgery and may affect your ability to drive. You
should, however, check with your insurance company before returning to driving. Your doctors will be happy to provide you with advice on request.

Privacy & dignity
Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high-tech equipment and/or specialist one to one care is required.

Hair removal before an operation
For most operations, you do not need to have the hair around the site of the operation removed. However, sometimes the healthcare team need to see or reach your skin and if this is necessary they will use an electric hair clipper with a single-use disposable head, on the day of the surgery. Please do not shave the hair yourself or use a razor to remove hair, as this can increase the risk of infection. Your healthcare team will be happy to discuss this with you.

References
NICE clinical guideline No 74: Surgical site infection (October 2008); Department of Health: High Impact Intervention No 4: Care bundle to preventing surgical site infection (August 2007)

Is there any research being carried out in this field at Addenbrooke’s Hospital?
There is no specific research in this area at the moment but all operative procedures performed in the department are subject to rigorous audit at a monthly audit and clinical governance meeting.

Who can I contact for more help or information?

Oncology nurses
Uro-oncology nurse specialist
01223 586748

Bladder cancer nurse practitioner (haematuria, chemotherapy & BCG)
01223 274608

Prostate cancer nurse practitioner
01223 274608 or 216897 or bleep 154-548

Surgical care practitioner
01223 348590 or 256157 or bleep 154-351

Non-oncology nurses
Urology nurse practitioner (incontinence, urodynamics, catheter patients)
01223 274608 or 586748 or bleep 157-237

Urology nurse practitioner (stoma care)
01223 349800
What should I do with this leaflet?

Thank you for taking the trouble to read this patient information leaflet. If you wish to sign it and retain a copy for your own records, please do so below.

If you would like a copy of this leaflet to be filed in your hospital records for future reference, please let your urologist or specialist nurse know. If you do, however, decide to proceed with the scheduled procedure, you will be asked to sign a separate consent form which will be filed in your hospital notes and you will, in addition, be provided with a copy of the form if you wish.

I have read this patient information leaflet and I accept the information it provides.

Signature…………………………………………………….Date………………………………
We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team:
patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

Document history
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