Reconstruction of the ureter (re-fashioning of drainage of urine to the bladder after scarring or damage to the ureter): procedure-specific information

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 GP or other healthcare professionals. Alternative treatments are outlined below and can be discussed in more detail with your Urologist or Specialist Nurse.

What does the procedure involve?
This describes a number of procedures to re-establish drainage of urine into the bladder when it has been interrupted because of scarring or damage to one of the ureters (the tubes which drain urine from the kidney to the bladder).

What are the alternatives to this procedure?
Long-term drainage with a ureteric stent, nephrostomy tube (external drain), conservative management (leaving the kidney to lose its function spontaneously).

What should I expect before the procedure?
If you are taking Aspirin or Clopidogrel on a regular basis, you must discuss this with your urologist because these drugs can cause increased bleeding after surgery. There may be a balance of risk where stopping them will reduce the chances of bleeding but this can result in increased clotting, which may also carry a risk to your health. This will, therefore, need careful discussion with regard to risks and benefits.

You will usually be admitted on the day before your surgery. You will normally receive an appointment for pre-assessment, approximately 14 days before your admission, 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, Specialist Registrar, House Officer and your named nurse.
You will be asked not to eat or drink for 6 hours before surgery and, immediately before the operation, you may be given a pre-medication by the anaesthetist which will make you dry-mouthed and pleasantly sleepy. You will also be given an injection under the skin of a drug (Clexane®) which, along with elasticated stockings provided on the ward, will help prevent thrombosis (clots) in your 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 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?**

A full general anaesthetic (where you are asleep throughout the procedure) will normally be used.

A bladder flap and hitch

Drainage may be re-established by a variety of means; by directly re-joining the ends of the ureter above and below the area of blockage, by re-implanting the ureter into the bladder, by fashioning a tube of bladder to reach up to the ureter above the blockage (a bladder flap), by transferring the end of the blocked ureter...
over to the ureter on the other side or by replacing the ureter along its whole length with a segment of intestine (bowel).

The choice of procedure will be discussed with you in detail by your Consultant. However, it is often not clear before the operation which procedure will be most appropriate for your particular problem, so a range of options are usually discussed.

**What happens immediately after the procedure?**

An internal drain (ureteric stent) is usually placed across the join where the blockage has been in order to allow free drainage of urine into the bladder and to avoid leakage outside the ureter.

There will be a drainage tube close to the wound to drain fluid away from the internal area where the operation has been done. There is usually a catheter in the urethra (water pipe) and, possibly, an additional catheter directly into the bladder through the skin of the lower abdomen (a suprapubic catheter).

After the operation, you may spend some time in the Intensive Care Unit or in the Special Recovery area of the operating theatre before returning to the ward. You will normally have a drip in your arm and, occasionally, a further drip into a vein in your neck.

You will be encouraged to mobilise as soon as possible after the operation because this encourages the bowel to begin working. We will start you on fluid and food as soon as possible. We normally use elastic stockings to minimise the risk of blood clot (deep vein thrombosis) in your legs. A physiotherapist will come and show you some deep breathing and leg exercises, and you will sit out in a chair for a short time after your operation.

If you have a drain or a tube in your blocked kidney (a nephrostomy tube), this may be removed on the ward or at a later stage after your discharge.

The average stay in hospital will last approximately 10-14 days.

**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 1 in 10)**

- [ ] Recurrent urine infections requiring long-term antibiotics
- [ ] Infections (if a segment of bowel is used)
- [ ] Decreased kidney function with time
Occasional (between 1 in 10 and 1 in 50)

☐ Anaesthetic or cardiovascular problems possible requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)
☐ Failure to establish good drainage requiring repeat surgery
☐ Blood loss requiring transfusion or further surgery
☐ A temporary of long-term tendency for the blood to be more acidic than normal requiring medication, especially if a segment of bowel is used
☐ Infection or hernia of the incision requiring further treatment
☐ Diarrhoea/vitamin deficiency/constipation due to shortened bowel requiring treatment (if a segment of bowel is used)
☐ Scarring of the bowel requiring further surgery

Rare (less than 1 in 50)

☐ Tumour formation in the bowel if a segment of bowel is used

Hospital-acquired infection (overall risk for Addenbrooke’s)

☐ Colonisation with MRSA (0.02%, 1 in 5,000)
☐ Clostridium difficile bowel infection (0.04%; 1 in 2,500)
☐ MRSA bloodstream infection (0.01%; 1 in 10,000)

(These rates may be greater in high-risk patients e.g. with long-term drainage tubes, after removal of the bladder for cancer, after previous infections, after prolonged hospitalisation or after multiple admissions)

What should I expect when I get home?

When you leave hospital, you will be given a “draft” 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 6 weeks before full healing occurs. You may return to work when you are comfortable enough and your GP is satisfied with your progress.

It can take several months for the strength of the wound to return to normal and you should avoid heavy lifting for up to 6 months.

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.
Are there any other important points?

An appointment will be made within 6 weeks for you to have your stent removed, either under local or general anaesthetic. This will be discussed with you and arrangements made before you go home.

A follow-up outpatient appointment will be arranged for you some 6-8 weeks after the operation. You will receive this appointment either whilst you are on the ward or shortly after you get home.

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 3 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.

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 & 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 247608 or 216897 or bleep 154-548
- Surgical Care Practitioner
  01223 348590 or 256157 or bleep 154-134

Non-Oncology Nurses

- Urology Nurse Practitioner (incontinence, urodynamics, catheter patients)
  01223 274608 or 586748
- Urology Nurse Practitioner (stoma care)
  01223 349800
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Patient Advice & Liaison Centre (PALS)
- Telephone
  +44 (0)1223 216756 or 257257
  +44 (0)1223 274432 or 274431
- PatientLine
  *801 (from patient bedside telephones only)
- E mail
  pals@addenbrookes.nhs.uk
- Mail
  PALS, Box No 53
  Addenbrooke's Hospital
  Hills Road, Cambridge, CB2 2QQ

Chaplaincy and Multi-Faith Community
- Telephone
  +44 (0)1223 217769
- E mail
  derek.fraser@addenbrookes.nhs.uk
- Mail
  The Chaplaincy, Box No 105
  Addenbrooke's Hospital
  Hills Road, Cambridge, CB2 2QQ

MINICOM System ("type" system for the hard of hearing)
- Telephone
  +44 (0)1223 274604

Access Office (travel, parking & security information)
- Telephone
  +44 (0)1223 586969

What should I do with this form?
Thank you for taking the trouble to read this information sheet. 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 form 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 information sheet and I accept the information it provides.

Signature........................................................................Date........................................
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How can I get information in alternative formats?

Please ask if you require this information in other languages, large print or audio format: 01223 216032 or patient.information@addenbrookes.nhs.uk

Polish Informacje te można otrzymać w innych językach, w wersji dużym drukiem lub audio. Zamówienia prosimy składać pod numerem: 01223 216032 lub wysyłając e-mail: patient.information@addenbrookes.nhs.uk

Portuguese Se precisar desta informação num outro idioma, em impressão de letras grandes ou formato áudio por favor telefone para o 01223 216032 ou envie uma mensagem para: patient.information@addenbrookes.nhs.uk

Russian Если вам требуется эта информация на другом языке, крупным шрифтом или в аудиоформате, пожалуйста, обращайтесь по телефону 01223 216032 или на вебсайт patient.information@addenbrookes.nhs.uk

Cantonese 若你需要此信息的其他语言版本、大字体版或音頻格式, 請致電 01223 216032 或發郵件到: patient.information@addenbrookes.nhs.uk

Turkish Bu bilgiyi diğer dillerde veya büyük baskıyla ya da sesli formatta istseniz lütfen su numaradan kontak kurun: 01223 216032 veya asagıdaki adrese e-posta gönderin: patient.information@addenbrookes.nhs.uk

Bengali এই তথ্য বাংলা অক্ষরে হ্যাতে ছেড়ে দিতে চাইলে নম্বর 01223 216032 দিয়ে সংযুক্ত হন করুন বা patient.information@addenbrookes.nhs.uk চিঠিপত্র পাঠান।
Addenbrooke’s is smoke-free. You cannot smoke anywhere on the site. Smoking increases the severity of some urological diseases and increases the risk of post-operative complications. For advice on quitting, contact your GP or the NHS smoking helpline free on 0800 169 0 169

Document history
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