Laparoscopic simple removal of the kidney: 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 involves removal of the kidney through several keyhole incisions. It requires the placement of a telescope and operating instruments into your abdominal cavity using 3-4 small incisions. One incision will need to be enlarged to remove the kidney.

What are the alternatives to this procedure?
Observation, open surgery

What is laparoscopic surgery?
Laparoscopy (otherwise known as “keyhole surgery”) is a form of minimal access surgery. This involves performing operations which are traditionally done by an “open” method but using “keyholes” instead. A number of urological procedures are now being performed by this method. It has been shown to be safe and effective for kidney surgery; for the removal of a kidney it is now the method of choice.
Your urologist will discuss the details of the procedure with you whilst you are an outpatient, outlining the procedure as part of your consent. You should be aware that there is a small chance (less than 1%) that your procedure may need to be converted to an open procedure. For this reason, if you are insistent that you would not agree to an open operation under any circumstances, we would not be able to proceed with the laparoscopic operation.
What should I expect before the procedure?

You will usually be admitted on the same day as your surgery. If not done the same day as your urology clinic appointment, 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 surgical team which may include the Consultant, Specialist Registrar, House Officer and your named nurse.

One important thing that you must do is to prepare yourself to mobilise immediately after the operation. You should try to walk at least 10 lengths of the ward before your operation.

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 need to wear anti-thrombosis stockings during your hospital stay; these help prevent blood clots forming in the veins of your legs during and after surgery.

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 will be used and you will be asleep throughout the procedure.

You will be transferred to the operating theatre and you will be taken first to the anaesthetic room. They may put a drip in to your arm to allow them to access your circulation during the operation. You will be anaesthetised and taken into the operating theatre. During the surgery you will be given antibiotics by injection; If you have any allergies, be sure to let the anaesthetist know.

The kidney is disconnected through several keyhole incisions and put into a bag which is then removed by extending one of the keyhole incisions.

A bladder catheter is normally inserted during the operation to monitor urine output and rarely, a drainage tube may be placed through the skin into the bed of the kidney.

**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 on the morning after surgery.

The expected hospital stay is 1 night. It is safe for most patients to go home on the afternoon after surgery.
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)**
- Temporary shoulder tip pain
- Temporary abdominal bloating

**Occasional (between 1 in 10 and 1 in 50)**
- Bleeding, infection, pain or hernia of the incision requiring further treatment

**Rare (less than 1 in 50)**
- Bleeding requiring conversion to open surgery or requiring blood transfusion
- Entry into lung cavity requiring insertion of a temporary drain
- Recognised (or unrecognised) injury to organs/blood vessels requiring conversion to open surgery (or deferred open surgery)
- Involvement or injury to nearby local structures (blood vessels, spleen, liver, kidney, lung, pancreas, bowel) requiring more extensive surgery
- Anaesthetic or cardiovascular problems possibly requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)

**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?
Before you leave hospital, the team will ensure you are safe to be discharged 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.
There may be some discomfort from the small incisions in your abdomen but this can normally be controlled with simple painkillers.

All the wounds are closed with absorbable stitches which do not require removal.

It will take 10-14 days to recover fully from the procedure and most people can return to normal activities after 2-4 weeks.

**What else should I look out for?**

If you develop a temperature, increased redness, throbbing or drainage at the site of the operation, increasing abdominal pain or dizziness, please contact your GP/Ward M4 (01223 348537)/ On-Call Urology Specialist Registrar (via hospital switchboard 01223 245151) immediately.

**Are there any other important points?**

A follow-up outpatient appointment will normally be arranged for you around 6 weeks after the operation. At this time, we will be able to inform you of the results of pathology tests on the removed kidney.

It will be at least 14-21 days before the pathology results on the tissue removed are available. You and your GP will be informed of the results by letter.

After removal of one kidney, there is no need for any dietary or fluid restrictions since your remaining kidney can handle fluids and waste products with no difficulty.

**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

**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……………………………

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語言版本、大字體版或音頻格式，請致電 01223 216032 或發郵件到: patient.information@addenbrookes.nhs.uk

Turkish Bu bilgisi diğer dillerde veya büyük baskı olduğu ya da sesli formatta isterseniz lütfen su numaradan kontak kurun: 01223 216032 veya aşağıdaki adrese e-posta gönderin: patient.information@addenbrookes.nhs.uk

Bengali এই তথ্য বাংলায়, বড় ফরফরে বা অডিও টেপে পেতে চাইলে দরকার করুন 01223 216032 নম্বরে ফোন করুন বা patient.information@addenbrookes.nhs.uk এ-মেইল করুন।
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
Author(s) Nikesh Thiruchelvam (on behalf of the Consultant Urologists)
Department Department of Urology, Box No 43
Addenbrooke’s Hospital
Cambridge University Hospitals NHS Foundation Trust
Hills Road
Cambridge, CB2 2QQ
www.addenbrookes.org.uk
Contact number 01223 216575
Fax number 01223 216069
Dept website www.camurology.org.uk
First published May 2005
Review date April 2014
File name Laparoscopic simple removal of the kidney
Version number 5.0
Ref 69/Urol_04_11