

PATIENT INFORMATION

Percutaneous removal of kidney stone(s): procedure-specific information

What is the evidence base for this information?

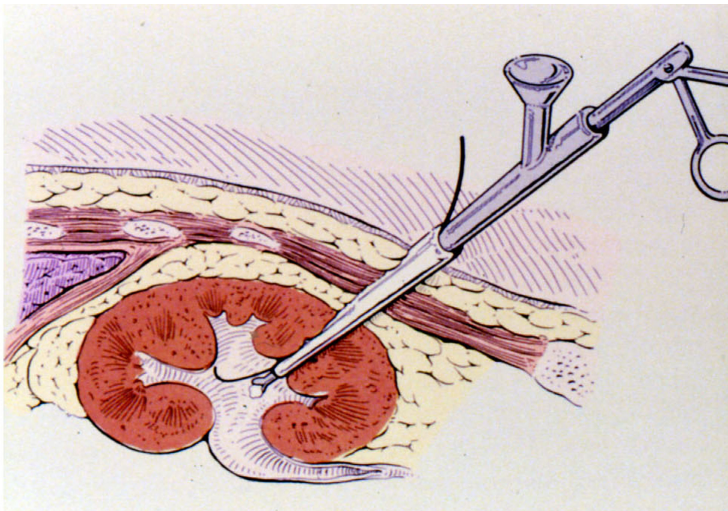
This leaflet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence-based sources; it is, therefore, a reflection of best practice in the UK. It is intended to supplement any advice you may already have been given by your GP or other 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?

Disintegration & extraction of kidney stones with a telescope placed into the kidney through a small puncture in the back. This usually includes cystoscopy and x-ray screening

What are the alternatives to this procedure?

External shock wave treatment, open surgical removal of stones, observation



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 same day as 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. An X-ray may be taken in advance of surgery to confirm the position of your stone(s).

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.

If you are admitted on the day before surgery, you will normally be given antibiotics into a vein to prevent any infection at the time 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

What happens during the procedure?

Normally, a full general anaesthetic will be used and you will be asleep throughout the procedure.

You will usually be given injectable antibiotics before the procedure, after checking for any allergies.

The operation is usually carried out in a single stage. First, a small tube is inserted up the ureter into the kidney by means of a telescope passed into the bladder. You are then turned on to your face and a puncture track into the kidney is established, using X-ray guidance. Finally, a telescope is passed into the kidney and the stone(s) extracted or disintegrated. A catheter is usually left in the bladder at the end of the procedure together with a drainage tube in the kidney.

It may be necessary to puncture the kidney at more than one site if you have many stones scattered throughout the kidney.

What happens immediately after the procedure?

On the day after surgery, a further X-ray is normally performed to assess stone clearance. Occasionally, it may be necessary to perform an X-ray down the kidney drainage tube using contrast medium. If the X-ray is satisfactory, the tube in your kidney and the bladder catheter will be removed. There is often some leakage from the kidney tube site for 24-48 hours and you will be only discharged once this leakage has resolved.

The average hospital stay is 4-5 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)

- Temporary insertion of a bladder catheter and ureteric stent/ kidney tube needing later removal
- Transient blood in the urine
- Transient raised temperature

Occasional (between 1 in 10 and 1 in 50)

- Occasionally more than one puncture site is required
- No guarantee of removal of all stones & need for further operations
- Recurrence of new stones
- Failure to establish access to the kidney resulting in the need for further surgery

Rare (less than 1 in 50)

- Severe kidney bleeding requiring transfusion, embolisation or at last resort surgical removal of kidney.
- Damage to lung, bowel, spleen, liver requiring surgical intervention.
- Kidney damage or infection needing further treatment
- Over-absorption of irrigating fluids into blood system causing strain on heart function

Hospital-acquired infection (overall chance of contracting infection during stay at the West Suffolk Hospital (all wards included))

(obtained from West Suffolk Hospital Infection Control Data June 2009)

- MRSA bloodstream infection (0.0000394 cases per bed day occupancy)
- Clostridium difficile bowel infection (0.0004865 cases per bed day occupancy)

(These rates may be greater in high-risk patients e.g. with long-term drainage tubes, after prolonged hospitalisation or after multiple admissions)

What should I expect when I get home?

When you get home, you should drink twice as much fluid as you would normally to flush your system through and minimise any bleeding. You should aim to keep your urine permanently colourless to minimise the risk of further stone formation.

It may take at least 2 weeks to recover fully from the operation. You should not expect to return to work within 10 days, especially if your job is physically strenuous.

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.

What else should I look out for?

If you develop a fever, severe pain on passing urine, inability to pass urine or worsening bleeding, you should contact your GP immediately. Small stone fragments may also pass down the ureter from the kidney, resulting in renal colic; in this event, you should contact your GP immediately.

Are there any other important points?

You can prevent further stone recurrence by implementing changes to your diet and fluid intake. If you have not already received a written leaflet about this, contact your named nurse, the Specialist Nurse in outpatients or your Consultant.

Is there any research being carried out in this field?

We are currently closely assessing the outcomes of this operation on an ongoing basis. 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?

- Uro-Oncology Nurse Specialist 01284 712735
- Urology Nurse Practitioner for 'haematuria clinic', chemotherapy & BCG therapy 01284 712806
- Urology Nurse Practitioner for prostate (transrectal) ultrasound clinic, erectile dysfunction clinic 01284 713229
- Urology Nurse Practitioner for prostate assessment clinic, self catheterisation clinic) 01284 713229

Other contacts

Chaplaincy - Telephone: 01284 713486

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.

I have read this information sheet and I accept the information it provides.

Signature.....Date.....