

Department of Urology

Patient Information Sheet

Percutaneous Nephrolithotomy (PCNL)

The removal of a stone in the kidney using a telescope passed through the back

This operation involves using an incision (surgical cut) over the kidney at the back, and a telescope is passed directly into the kidney. The stone is then broken up and removed.

This procedure requires a hospital stay on average of 2 days.

This information sheet was developed and agreed by our Urology Team. Information within this sheet was obtained from various sources including; the Urology Team, the British Association of Urological Surgeons, other NHS Trusts and Department of Health Websites.

What are the intended benefits of this procedure?

To remove a stone in the kidney

What are the alternatives to this procedure?

Where appropriate; Observation, telescopic and laparoscopic stone removal, Shock-wave therapy.

What are the most frequently occurring events or serious risks of this procedure?

Common

- Temporary insertion of a urinary catheter (a tube passed up the urethra and into the bladder) also a temporary kidney drain is usually required.

Occasional

- Bleeding requiring blood transfusion or further surgery.
- A need to insert a temporary ureteric stent to allow the kidney to drain which would be removed at a later date
- Septicaemia from breaking up infected stones

Rare

- Prolonged urine drainage through the drain site due to slow healing of the cut in the kidney.
- Movement of fragments of stone down the ureter requiring further surgery

Very Rare

- Involvement or injury to nearby structures - blood vessels, spleen, liver, lung, and bowel - requiring more extensive surgery
- Anaesthetic or cardiovascular problems possibly requiring a period of time in the Intensive Care Unit (including chest infection, pulmonary embolism, stroke, deep vein thrombosis, heart attack and death)
- Damage to the kidney itself, necessitating removal
- Inability to remove all stones and further procedures, x-ray procedures or surgery required

What sort of anaesthetic is used?

Usually a general anaesthetic will be used. Your Consultant or Specialist Nurse will be able to give you further information on which anaesthetic you are likely to require.

As this is being performed under a general anaesthetic, you will be assessed for your general health before the procedure at a 'Pre-Assessment' clinic and given all the information required to prepare you for an anaesthetic.

What does the procedure involve?

You will be admitted to the hospital the day of your operation and given instructions when to stop eating and drinking (usually 6 hours before your operation for food, and 2 for water). You will be asked to put on elastic compression stockings (to help reduce leg blood clots from lack of movement) with your hospital gown to go to theatre. You will meet your anaesthetist and the operating surgeon will talk to you again before surgery and under your supervision make a mark on your skin to indicate which side is to be operated on.

A urinary catheter will be put into the bladder once the procedure is completed, to enable us to assess the amount of urine your kidneys are producing, along with usually a wound drain to collect remaining blood and urine from the kidney.

What happens after the procedure?

Once back on the ward, you will be monitored closely and the amount urine produced assessed. You will be encouraged to drink water straight after your operation but you will keep your intravenous infusion until you are able to drink normally.. The drainage tube, catheter and intravenous infusion are removed over

the course of the next day or two. You will be allowed to eat once you are drinking normal fluids without any problems.

Your wound will probably have stitches under the skin, which dissolve of their own accord in a couple of week's time. When you leave hospital you should not require any wound dressings at all.

As soon as possible, you will be encouraged to start mobilising and moving about, beginning the day after your operation.

What happens when I go home?

When you leave hospital, you will be walking about and eating and drinking normally - you will not need to change your fluid or diet habits.

Full healing of your wound will take up to 6-8 weeks, but you will feel back to normal in approximately 2 weeks. You may return to work after this time, if you feel able to and your GP is satisfied with your recovery.

Some people experience discomfort or twinges in the area of their wound for several months.

What else should I look out for?

If you develop a fever, increased pain, redness or any oozing from your wound you should contact your GP.

Further Appointments or Treatments

You will be asked to return to our Outpatient Clinic 6-8 weeks later for a check up.

If you require other treatments or procedures you will be given this information before you leave hospital.

Who should I contact for more information?

- **The Specialist Urology Nurses:**

Sue Sill & Chris Backhouse
020 8934 3547

Denise Exon, Urology Nurse at St George's
020 8672 1255 x3364

- **The Urology Ward – Alexandra: 020 8934 3152**

- Your Urology Consultant.