

## Who can I contact if I have a problem when I get home?

If you experience any problems related to your surgery or admission once you have been discharged home. Please feel free to contact 4A, 4B or 4C ward for advice from the nurse in charge. They will assist you via the telephone, advise you return to your GP or ask you to make your way to the ED department at Whiston Hospital depending upon the nature of your concern.

**4A Ward – 0151 430 1420**

**4B Ward – 0151 430 1637**

**4C Ward – 0151 430 1643**

## Who can I contact for more help or information?

Best Health (prepared by the British Medical Association)

NHS Clinical Knowledge Summaries (formerly known as Prodigy)

NHS Direct

Patient UK

Royal College of Anaesthetists (for information about anaesthetics)

Royal College of Surgeons (patient information section)

Whiston Hospital  
Warrington Road,  
Prescot, Merseyside, L35 5DR  
Telephone: 0151 426 1600



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# Lithotripsy for Stones

This leaflet can be made available  
in alternative languages / formats on request.

如有需要，本传单可提供其他语言/版式  
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Na żądanie ta ulotka może zostać udostępniona  
w innych językach/formatach.

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## What is the evidence base for this information?

This publication 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 urological 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 the administration of shockwaves through the skin to fragment urinary tract stones into small enough fragments to pass naturally. The procedure involves either x-ray or ultrasound scanning to localise the stone(s).

## What are the alternatives to this procedure?

Telescopic surgery, open surgery, observation to allow spontaneous passage.

## What should I expect before the procedure?

You will usually be admitted on the same day as your treatment. It may be useful to bring your own dressing gown to wear over your hospital gown.

You will be asked to undergo swabbing of your nose and throat to ensure that you are not carrying MRSA.

On arrival, an X-ray may be taken to confirm the presence of your stone(s).

You may have a light meal on the morning of your treatment but you should drink only clear fluid in the 2-4 hours before the treatment. We may give you an injection of a strong painkiller and an anti-inflammatory suppository once you arrive in the clinic.

## 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 blood clots or 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 will be informed before your discharge of any follow-up arrangements. This will usually involve either further lithotripsy, operative surgery or a simple follow-up outpatient appointment when a further X-ray will be taken.

If you have a stent in place, you may be given an appointment for removal of the stent in the Day Surgery Unit under local anaesthetic if this is appropriate.

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.

## 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.

The rates for hospital-acquired infection 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?**

By the time of your discharge from hospital, you should:

- Be given advice about your recovery at home
- Ask when to resume normal activities such as work, exercise, driving, housework and sexual intimacy
- Ask for a contact number if you have any concerns once you return home
- Ask when your follow-up will be and who will do this (the hospital or your GP)
- Ensure that you know when you will be told the results of any tests done on tissues or organs which have been removed

When you get home, you should drink twice as much fluid as you would normally to flush your system through and minimise any bleeding or infection. Painkillers should be taken as necessary and you must complete the course of antibiotics.

Please adhere to advice unless you are fluid restricted or instructed by a nephrologist.

Some blood in the urine is normal for 48-72 hours.

If you develop bruising/blistering in your loin or on your abdomen, simple skin creams will usually ease any discomfort and the bruising normally resolves within 7 days.

Please be sure to inform your surgeon 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 regular prescription for Warfarin, Aspirin or Clopidogrel (Plavix)
- A previous or current MRSA infection
- A high risk of variant-CJD (if you have received a corneal transplant, a neurosurgical dural transplant or previous injections of human-derived growth hormone)

At some stage during the admission process, you will be asked to sign the second part of the consent form giving permission for your operation to take place, showing you understand what is to be done and confirming that you wish to proceed. Make sure that you are given the opportunity to discuss any concerns and to ask any questions you may still have before signing the form.

### **What happens during the procedure?**

Normally, no anaesthetic is necessary and you will be awake throughout the procedure. Treatment is normally carried out under sedation but children usually require a general anaesthetic.

The treatment will be monitored by a nurse and a lithotripsy technician. The shock waves can cause deep discomfort in the kidney and a sensation of being flicked with an elastic band on the skin of your back. If this proves excessively painful, additional painkiller and sedation can be administered during the treatment.

Treatment normally lasts between 30 and 60 minutes, depending on the size of your stone(s).

## What happens immediately after the procedure?

In general terms, you should expect to be told how the procedure went and you should:

- Ask if what was planned to be done was achieved
- Let the medical staff know if you are in any discomfort
- Ask what you can and cannot do
- Feel free to ask any questions or discuss any concerns with the ward staff and members of the surgical team
- Ensure that you are clear about what has been done and what is the next move

Immediately after the treatment, you may feel quite drowsy. You will normally be taken back to a cubicle to recover with a cup of tea or coffee. The Specialist Nurse will also perform routine post-operative checks.

As soon as you have recovered from the treatment, you will be able to go home but you must bring someone with you to escort you home; you should not attempt to drive yourself because of the effects of the sedation.

Antibiotics and painkillers may be given to you before your discharge.

The average hospital stay is less than 1 day.

## 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.

## Common (greater than 1 in 10)

- Bleeding on passing urine for a short period after the procedure
- Pain in the kidney as small fragments of stone pass after treatment (20%)
- Urinary tract infection due to bacteria released from the stone during fragmentation, requiring antibiotic treatment (10%)
- Bruising or blistering of the skin in the loin or on the front of the abdomen
- Need for repeated ESWL treatments (15-20%)
- Failure to fragment very hard stone(s) requiring an alternative treatment (less than approximately 14%)

## Occasional (between 1 in 10 and 1 in 50)

- Severe infection requiring intravenous antibiotics (less than 1%) and sometimes drainage of the kidney by a small drain placed through the back into the kidney

Stone fragments occasionally get stuck in the tube between the kidney and the bladder requiring hospital attendance and, occasionally, surgery to remove the stone fragments

## Rare (less than 1 in 50)

- Kidney damage (bruising) or infection needing further treatment
- Recurrence of stones (less than 1%)

## Hospital-acquired infection

- Colonisation with MRSA (0.9% - 1 in 10)
- Clostridium difficile bowel infection (0.01% - 1 in 10,000)
- MRSA bloodstream infection (0.02% - 1 in 5000)