

Kidney Stones

Information for patients



Abdominal Medicine
and Surgery

This booklet has been designed to provide information on the service provided at the Lithotripsy Unit. It is hoped that it will help allay any fears or anxieties and answer some of the questions that you may have.

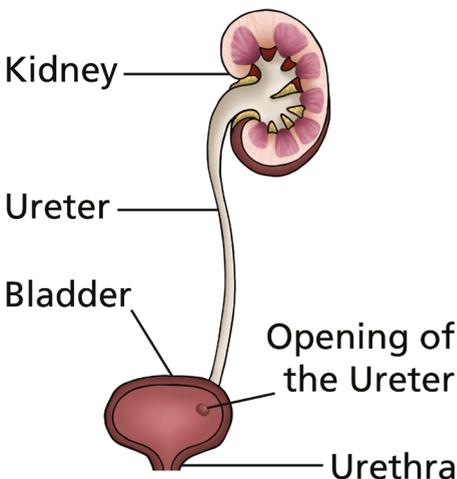
To get to this stage you have probably been referred to the centre by a doctor/specialist. This will be due to the fact that you have been found to have Kidney/Renal stones.

What are kidney/renal stones?

Kidney or renal stones are one of the most common diseases of the urinary tract. The urinary tract comprises of the Kidneys, Ureters, Bladder and the Urethra.

A kidney stone forms from crystals in your urine that build up on the inside of the kidney. This is due to the concentration of certain components in the urine that can be improved by

drinking more fluids. Some stones may pass through the body in the urine without being noticed, whereas others need medical treatment. It remains unclear what causes the stones to form. However, it has been suggested that it can relate to food/diet, family history, urine infections and other kidney diseases.



What are the symptoms?

Unfortunately kidney stones can cause severe pain. This may occur when the stone moves. The pain is usually described as a sharp, cramping pain felt in the back, side and /or lower abdomen.

How are stones diagnosed / found?

It may be that you have had no symptoms and that the stones were found incidentally or by accident but in most cases an X-ray of the kidneys, ureters and bladder will show the stones as small white dots – dependent on their size.

If a plain x-ray is unable to show the stones this may be because they are radio-lucent (not detected by x-ray) which may result in a different type of test called a CT Scan). These tests are important as the stones size and location is important when deciding on the treatment. Any allergies must be mentioned at this stage.

What does the treatment involve?

There are several kinds of treatment of the stones but you have been referred to the unit to have what is called Lithotripsy also known as ESWL (Extra corporeal Shockwave Lithotripsy). This is the most frequently used type of treatment.

The shock waves are produced by a machine and passed through the body via a soft cushion. The stones are located by one of two ways in the unit - ultra sound or x-ray. The shock waves are passed through the body to the stones. This then causes them to break down into sand-like particles that are passed through the urinary tract.

The procedure is non-invasive therefore it all takes place outside the skin surface. Occasionally larger pieces of stone may get stuck in the ureter and need to be removed by a telescopic operation. (Ureteroscopy)

What happens on the day?

When you arrive at the unit you will be greeted by the unit Sister. A brief assessment will then take place i.e. any past medical history of note, any medication you are taking etc. You may then be asked to go for an x-ray dependent on the last time you were scanned.

It is a good idea if you bring a dressing gown and some reading material along with you as you can expect to be in the department for anything up to four hours.

We will ask you to produce a sample of urine on your arrival. We will then ask you to change into a hospital gown to enable us to easily reach the treatment area. You will be then offered some analgesia or painkillers, as the treatment can sometimes be uncomfortable. Additional pain relief if required will be administered accordingly. Patients who have experienced treatment before describe the sensation as similar to being flicked by an elastic band. They also say that after a short period the area can become numb. We will endeavour to make the procedure as painless as possible.

Once you are shown into the unit the doctor will locate your stone/s and the treatment will begin. You may receive up to 4,000 shock waves over a period of forty minutes. The intensity/power of the treatment will depend on how you tolerate it. Obviously, the higher the power, the better the result.

The treatment may cause a bruising / slight bleeding to the surface of the skin.

Following treatment you will be offered refreshments and may be given a prescription to collect from the hospital pharmacy. The unit Sister will then go through all discharge advice and instructions and answer any questions you may have.

The treatment may cause discomfort for a few days after so it is best not to have the treatment prior to any important social engagements/trips away. You may also experience blood in the urine and 'colicky' type pain. This is quite normal. It is important that you observe the urine for sand like granules/ grit, which can be tiny particles of stone.



Occasionally a fragment of the stone may break off following treatment and be too big to pass naturally therefore becoming stuck in the ureter. This will cause intense discomfort and will require admission to hospital for surgical removal. Before you leave the department the sister will provide you with instructions on any action you will need to take should you require medical attention.

What happens next?

The treatment may need to be repeated several times or may be done just the once – everyone is individual. You will be asked to attend the department at a convenient time to have a check x-ray/ultrasound scan to see how the treatment has worked for you. We will keep your GP/Consultant informed of your progress. Should you require any further information please do not hesitate to contact us on the numbers on the next page. We look forward to seeing you soon.



Do not hesitate to contact us if we can be of any further help:

The Lithotripsy Unit
Pyrah Dept of Urology
David Beever's Day Unit
St. James's University Hospital

Sister: 0113 206 6995

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