THE SHOCKWAVE SPECIALISTS

KING EDWARD VII's HOSPITAL

Patient Information Leaflet

Extracorporeal Shockwave Lithotripsy (ESWL)

About the procedure

Lithotripsy is a low-risk, non-invasive procedure used to break kidney stones using high-energy shockwaves. These shockwaves are generated outside the body and focused onto the kidney stone using ultrasound and, where required, low-dose X-ray imaging (fluoroscopy). Not all patients require X-ray localisation. Where X-ray is used, radiation exposure is kept as low as reasonably practicable (ALARP) and within established safety guidelines. The shockwaves pass harmlessly through the body's tissues and interact with the stone, causing it to fragment into smaller pieces. These fragments are then passed naturally in the urine over time, usually with minimal discomfort. Lithotripsy is typically delivered as a course of up to three treatments, each lasting approximately 60–90 minutes.

What happens on the day of the procedure?

For morning appointments, we advise that you eat a light breakfast such as tea or coffee and toast. If you have an afternoon appointment, please have a light snack no later than 11am. Please take your usual medications unless you have been advised otherwise, and bring them with you if you will need to take them while you are at the hospital. You should not drive or use public transport on the day of treatment, and we recommend that you arrange for a responsible adult to accompany you to and from the hospital.

On arrival, please report to the main hospital reception, where you will be greeted by our specialist nursing team. A pre-assessment checklist and consent form will be completed, and your previous imaging will be reviewed prior to treatment. You will be asked to provide a urine sample to check for infection. Once this is completed, you will be asked to change into a hospital gown before being escorted to the treatment area.

Most patients tolerate lithotripsy well with simple pain relief. Patients are advised to take **paracetamol 1 g and ibuprofen 400 mg**, unless contraindicated, approximately **30–60 minutes before their appointment**. These medications can be taken together. If you are unsure whether ibuprofen is suitable for you, please seek advice from your GP or pharmacist. If you have previously found lithotripsy uncomfortable or feel you have a low pain threshold, please inform the team in advance of your appointment so this can be considered as part of your clinical care.

You will then be escorted into the treatment area, where you will meet the lithotripsy technician. You will be positioned on the treatment table, which may be on your back, front, or side depending on the position of the stone. Coupling gel will be applied to your skin, and care will be taken to ensure you are comfortable. Once positioning is complete, the technician will scan and precisely focus on the stone, which may take a few minutes before treatment begins. Each shockwave produces a clicking sound, and the sensation is commonly described as a light tapping or flicking on the skin.

The information is published is based on reputable sources of medical evidence and experience. The content is intended for general information only and does not replace the need for personal advice from a qualified health professional. If you have any feedback on the content of this patient information document please email: info@theshockwavespecialists.co.uk

THE SHOCKWAVE SPECIALISTS

When should shockwave lithotripsy NOT be done?

- If you think you may be pregnant, please inform the team before your appointment
- If you are taking anticoagulant medications (blood thinning drugs e.g., aspirin, clopidogrel, warfarin)
- Presence of a cardiac pacemaker
- Current urinary infections
- Untreated high blood pressure
- Aortic aneurysm

What to expect afterwards

After treatment, it is common to experience some bruising over the treatment area. You may also notice blood in your urine for a couple of days; this is normal and nothing to be concerned about. Continue to drink plenty of water, which will help your urine return to normal. Some patients may experience mild discomfort as stone fragments pass; **simple pain relief can be used as advised**. Do not take aspirin unless specifically instructed by your doctor. In rare cases, potential complications can occur after lithotripsy. These may include:

- **Fever, infection, or feeling generally unwell –** occurs in a small number of patients (around 2–4%). If this happens, please contact your GP or referring urologist immediately**.**
- **Obstruction from stone fragments (known as *steinstrasse*)** occurs in approximately 2–10% of patients and may cause pain or difficulty passing urine.
- **Formation of a haematoma** (a small collection of blood) around the kidney, including subcapsular haematoma, occurs in less than 1–2% of patients and usually resolves without treatment.
- **Need for further treatment**, particularly with larger stones, additional lithotripsy sessions or other procedures may be required to ensure complete stone clearance.

Please be reassured that serious complications are very rare, and the vast majority of patients recover quickly with no long-term effects.

Advice following your treatment

It is essential that you drink plenty of fluids after treatment. Aim to drink at least 2–3 litres (3–4 pints) of water per day until your follow-up appointment. It is advisable to rest on the day following treatment; however, if you feel well the next day, you may return to work and normal activities. After the first few days, keeping active can help with the passage of stone fragments. You may notice small fragments in your urine, although these are often too small to see.

The information is published is based on reputable sources of medical evidence and experience. The content is intended for general information only and does not replace the need for personal advice from a qualified health professional. If you have any feedback on the content of this patient information document please email: info@theshockwavespecialists.co.uk

THE SHOCKWAVE SPECIALISTS

Directions to the Hospital:

King Edward VII's Hospital, 5-10 Beaumont Street, Marylebone, London, W1G 6AA.



Please contact us if you have any questions or need further information

Appointments: 01603 975170
Email: info@theshockwavespecialists.co.uk
Emergency contact: If you develop fever, severe pain not controlled by simple analgesia, difficulty passing urine, or feel unwell please contact your Consultants Secretary or visit Accident & Emergency.

The information is published is based on reputable sources of medical evidence and experience. The content is intended for general information only and does not replace the need for personal advice from a qualified health professional. If you have any feedback on the content of this patient information document please email: info@theshockwavespecialists.co.uk