Extracorporeal shock wave lithotripsy (ESWL)

This involves the administration of shock waves through the skin to break up stones in the kidney or ureter tube (the tube draining the kidney into the bladder) into fragments which are small enough to pass down the ureter.

Alternative treatments to ESWL include:

- telescopic stone removal under general anaesthetic via the ureter tube (ureteroscopy combined with laser treatment)
- telescopic stone removal via a large telescope inserted through the skin overlying the kidney (percutaneous kidney stone removal - PCNL)
- or rarely, open stone removal

Side effects

Common things that you might experience after ESWL include:

- Blood in the urine for a few days afterwards.
- Bruising or blistering of the skin in the loin or on the front of the abdomen
- Pain in the kidney region as the fragments of stone pass down the ureter tube and into the bladder (20% chance). From time to time this pain is severe enough to require admission to hospital for pain relief (~1%).
- Urine infection from bacteria released as the stones break up (10% chance).
- Several sessions of ESWL may be required to break up the stones (20% chance).
- Even after several sessions of ESWL the stones may not break up and may as a consequence require alternative treatment.
- Severe urinary infection requiring admission to hospital for intravenous antibiotics is rare.
- Occasionally fragments of stone can get stuck in the ureter tube after ESWL. This may require admission to hospital for insertion of drainage tubes to relieve the obstruction and/or for surgical treatment under general anaesthetic to remove the stone. These drainage tubes can be internal in type (a ‘JJ stent’) or external, passing through the skin from the kidney (a nephrostomy tube).
- There is a risk that new stones may form in the future (50% in 5 years)
*** Warning ***

There are 3 situations in which you should definitely not undergo ESWL:

**Pregnant women**
If you undergo ESWL while pregnant, your baby could be seriously damaged. Therefore, if you are or could become pregnant while awaiting a course of ESWL, you must not undergo ESWL treatment.

**Patients with blood clotting problems**
If you have a problem with blood clotting (due to an inherited blood clotting problem or because you are taking blood thinning drugs such as warfarin, aspirin or anti-inflammatory drugs – also known as non-steroidal anti-inflammatories), or if you have been known to bleed heavily after previous surgical or dental treatment, you should not undergo ESWL treatment.

**Patients with active urinary tract infections**
If you have a urinary tract infection you should inform your doctor or the lithotripsy team there is a higher risk of sepsis if you undergo lithotripsy.

I have read and understand the explanation of lithotripsy and consent to the procedure

Patient signature:  
Patient name (print):  
Date:  

Doctor/Nurse signature:  
Doctor/Nurse name (print):  
Date:  

Please attach patient sticker