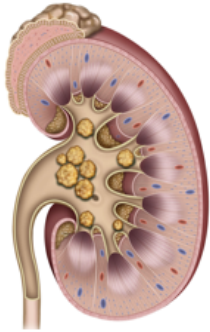
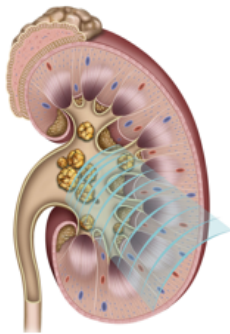


Lithotripsy (ESWL)

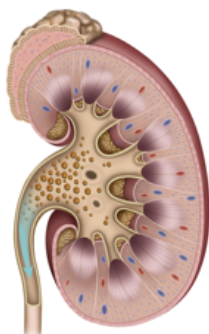
Procedure information



Stones in the kidney



Shockwaves break the stones into small fragments



Small stone fragments pass in the urine

About ESWL

Extracorporeal shockwave lithotripsy (ESWL), is a non-invasive procedure performed to break up kidney stones into small fragments using shockwaves, which allows the stone fragments to be passed.

Why is ESWL required?

ESWL can be used to break up kidney stones which are still in the kidney, before they start to cause symptoms. This can prevent them from going on to cause symptoms such as pain.

ESWL can also be used to break up stones which have started to move down the ureter (tube between the kidney and the bladder).

What does ESWL involve?

ESWL is performed under general anaesthetic (completely asleep). It is a non-invasive procedure – there are no cuts made.

Xrays or ultrasound are used to locate the kidney stone.

Shockwaves are passed through the skin of the back and focussed on the location of the stone. Up to 4000 shockwaves may be used in one session of ESWL.

The kidney stone is broken up into small fragments which are passed in the urine over the next few days.

The procedure is usually performed as day surgery – you can go home on the same day of the surgery as long as you are accompanied by a responsible adult.

What is the recovery after ESWL?

You will have soreness of the back and a graze where the shockwaves have passed through the skin.

Sometimes there will be some pain as the fragments of kidney stone pass from the kidney, down the ureter, into the bladder.

You will be given instructions for pain relief to take after the procedure.

You may have blood in the urine for few days after the procedure.

You may notice small fragments of kidney stone passing in the urine.

It is usually safe to drive 24 hours after the procedure.

You can usually return to work one to two days after the procedure.

What are the risks of ESWL?

Common risks (1/2 – 1/10)

- The kidney stone may not be completely removed.
- Bruising, grazing or blistering of the skin of the back where the shockwaves have passed through.

Occasional risks (1/10 – 1/50)

- Larger stone fragments may block the ureter (the pipe between the kidney and the

bladder), causing pain and sometimes requiring another procedure to correct, such as a ureteric stent.

- Urinary tract infection.
- Developing an abnormal heart rhythm during the procedure due to the shockwaves.

Very rare risks (<1/250)

- Major trauma to the kidney causing bleeding, requiring another procedure to correct, very rarely requiring removal of the kidney.
- Injury to a nearby organ such as the lung, liver, spleen or bowel, requiring another procedure to correct.
- A broken rib.
- Inflammation of the pancreas (pancreatitis).

The risks of anaesthesia have not been listed here.

What are the alternative treatment options?

- Conservative management of the stone – no treatment.
- Medications to dissolve the stone – not all types of stones can be dissolved.
- Ureteroscopy.
- Percutaneous nephrolithotomy (PCNL).

See www.brisbaneurologyclinic.com.au for information regarding these alternative treatment options.

For more information please visit www.brisbaneurologyclinic.com.au.

This is general information only. Please consult your doctor for more information and treatment options.

For appointments and enquiries please contact 07 3830 3300.

Smith, J. A., Howards, S. S., Preminger, G. M., & Hinman, F. (2012). *Hinman's Atlas of urologic surgery*. Philadelphia: Elsevier/Saunders.

Approved March 2019, For Review March 2021, C-01-32