

ESWL (EXTRACORPORAL SHOCK WAVE LITHOTRIPSY)

KIDNEY STONE SHOCKWAVE TREATMENT (EXTRACORPORAL SHOCK WAVE LITHOTRIPSY / ESWL)

Kidney stone shockwave treatment is medically referred to as Extracorporeal Shock Wave Lithotripsy (ESWL). It is a technique that has been used successfully to treat renal stones since around the 1980s. The procedure involves directing shockwaves from outside the body through the body's tissues, towards the kidney stones, where they break the stones up into smaller fragments. These fragments can then be passed through the urine.

WHO IS SUITABLE FOR KIDNEY STONE SHOCKWAVE TREATMENT?

Kidney stone shockwave treatment is most appropriate for patients with kidney stones that are less than 1.5cm in diameter. ESWL is most effective for patients with

stones in the kidney or in the ureter close to the kidney. The treatment may not be effective in patients with larger stones. There are numerous factors that may determine a patient's suitability for kidney stone shockwave treatment, and these can include:

- The size and shape of the stone

- The location in the urinary tract where the stone is present

- The patient's overall health

- The health of the patient's kidney(s).

If kidney stone shockwave treatment is not deemed to be an appropriate choice for you, the surgeons at Melbourne Urology Centre are experts in recommending another appropriate treatment, which may include:

- Medical expulsion therapy

- Minimally-invasive laser fragmentation

- Percutaneous nephrolithotomy (PCNL) surgery.

WHAT ARE THE ADVANTAGES OF KIDNEY STONE SHOCKWAVE TREATMENT?



The greatest advantage of kidney stone shockwave

treatment is that it is a non-invasive procedure, effectively treating kidney stones without the need for an incision or telescope/cystoscopy. Because of this, the patient does not usually require a hospital stay and can therefore resume most of their normal activities in 1-2 days following their treatment.

WHAT TO EXPECT DURING AND AFTER KIDNEY STONE SHOCKWAVE TREATMENT?



Kidney stone shockwave treatment does not involve any incisions being made, however you are likely to still receive some sedation or anaesthetic, which will help you to remain still during the procedure and reduce any discomfort. You will be positioned on an operating table in a position that will allow the surgeon to target the kidney stones with the shockwaves. An ultrasound (or xray) is then used to pinpoint the exact position of the stone within the kidney, and a specialized machine is used to direct the shockwaves precisely to that location. Typically 1000-2000 shockwaves are required to break a small kidney stone.

You may pass some small fragments of stone in the urine for some days following your kidney stone

shockwave treatment. These can occasionally cause mild pain as they pass. You may also experience some mild abdominal discomfort, which is often felt as a dull ache and reduces over the following days.

Depending on the stone density and size, repeat treatments of kidney stone shockwave therapy are sometimes required to break fragments up further.

Melbourne Urology Centre offers kidney stone shockwave treatment in Melbourne. Our team is dedicated to providing patients with the highest quality, personalized care. If you would like to discuss kidney stone shockwave treatment, contact our reception to make an appointment.

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Rassweiler, J. J., Renner, C., Chaussy, C., Thuroff, S., (2001), Treatment of renal stones by extracorporeal shockwave lithotripsy, *European Urology*, 39(2), [<https://doi.org/10.1159/000052435>], accessed 27/02/21.