

Information

What are kidney stones?

Your two kidneys filter the body's waste products out through your urine. Sometimes this waste product can accumulate causing crystals to form; these crystals combine to form a kidney stone.

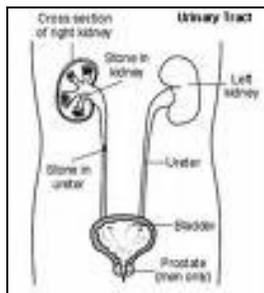


Figure 1 Overview of Urinary System

Removal of Stones

Stones can be removed by lithotripsy, a non-invasive procedure using sound waves (ESWL). Carefully directed shockwaves pass through the body and are aimed at the stones, causing them to crumble into smaller, sand-like particles so that they are easily passed with your urine.

What type of Anaesthetic?

Patients usually have a general anaesthetic for this procedure. Being asleep means you will feel no pain or discomfort during the procedure.

Occasionally a Spinal anaesthetic may be used where the anaesthetist places a needle in the back to cause numbness in the area to be operated on. You will remain awake but feel no pain or discomfort.

What does the surgeon do?

- the whole procedure takes about 45 minutes
- an intravenous (IV) line maybe inserted to give you fluids and medications
- An x-ray or ultra-sound finds the exact location of the kidney stones. The shockwaves are precisely aimed at the stone. If you are awake you may feel a "tapping" sensation as the waves pass harmlessly through your body
- Ear muffs are applied to protect you from the loud "bang" that is emitted when the shock waves are applied to the stone.



Figure 2 Shockwaves breaking up the kidney stone

What are J-J Stents?

J-J Stents are a hollow plastic tube inserted into the urinary tract prior to lithotripsy. It is absolutely mandatory that this stent be removed.

Are there any Complications?

As with any surgical procedure complications may occur.

The major potential problems are

- Post-operative discomfort
- Infection
- Bleeding from the kidney
- Obstruction of ureter with stone fragments
- Failure of stone to fragment.
- Bruising/pain where shockwaves entered

What to expect after the Operation

- You will be monitored for 2-4 hours post-procedure until the anaesthetic wears off.
- You will be able to go home approximately 3 hours after the procedure
- If you had a stent inserted this will be removed at a latter date, the surgeon will arrange this with you

You should contact your doctor if you:-

- Pass bright red blood in urine for more than 24 hours
- Have fever, shivers, shakes
- Severe pain not relieved through Panadeine Forte
- Difficulty in passing urine
- Persistent nausea and vomiting

Follow-Up:-

- 4-6 weeks after the procedure you need to have repeat x-rays (pathology form given to you prior to discharge from hospital)
- After you have had x-rays you need a review appointment with your surgeon

Recovery at Home

Your urine

- Drink plenty of fluids, about 2-3litres/day
- Urine maybe cloudy and slightly bloody for several weeks
- It may take several weeks for stone particles to pass
- Your doctor may ask you to strain your urine so as to collect some stone particles for analysis

Medication

- You may experience discomfort /bruising where shockwaves entered. This will resolve in a few days. Take Panadol/Panadeine as per manufactures instructions
- Some pain relief medication may cause constipation. To avoid this:
 - high fibre diet (prunes, bran etc)
 - you may need a laxative (Senokot)

Activity

- go home and rest after discharge
- do not drive a car, operate machinery, drink alcohol, exercise or work until the following day
- Normal daily activities may be resumed the day following discharge.

J-J Stents Complications

The J-J stent is a foreign body and may cause irritation and patient discomfort.

Symptoms may include:

- Stent colic/flank pain
- Difficulty/pain in urinating (dysuria)
- Blood in urine (haematuria)

Lithotripsy

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Admission Details:

* Hospital _____

* Date _____

* Time _____

FASTING FOR AT LEAST 6 HOURS BEFORE SURGERY

TAKE USUAL MEDICATION ON MORNING OF SURGERY (except aspirin/warfarin)

PLEASE BRING RECENT X-RAYS

**DO NOT TAKE ASPIRIN/WARFARIN/PERSANTIN
ONE WEEK PRIOR TO SURGERY**

Patient Information Leaflet

LITHOTRIPSY Extracorporeal Shockwave Lithotripsy (ESWL)



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