Extracorporeal Shock Wave Lithotripsy (ESWL)
Extracorporeal Shock Wave Lithotripsy (ESWL)

What are kidney stones?
Kidney stones are hard pieces of material made of salt. They build up over time and may vary from the size of a grain of sand to 3 centimetres or more across. Although these stones form in the kidney, they often move and can be found anywhere in the urinary tract. When the stones get too big to leave the body naturally, they can block the normal flow of urine (pee). This may cause sudden and severe pain. Other symptoms may include bloody or burning urination (when you pee) and nausea. Some people get kidney stones due to fluid and dietary intake, age, climate, infection, and inherited disorders.
What is extracorporeal shock wave lithotripsy (ESWL)?

A special machine makes energy shock waves which target your kidney stone(s). The brittle stone absorbs the shock waves and shatters into small fragments under the impact. Body tissues can be bruised by the shock, but major injury is rare. These fragments can then leave your body in the urine. X-ray equipment is used by your urologist to see the stone(s) during the treatment. ESWL does not make an incision (cut) or require a long recovery period.

How is ESWL done?

• You will lie in a comfortable position on a special table.

• The anesthetist (doctor that gives you sleeping medicine) will start an intravenous line (IV). You will get some medicine to make you feel comfortable during the treatment.

• An X-ray will be taken to find the exact location of the stone(s).
• The water balloon on the shock wave machine will be placed against your body.

• You will hear and feel a tapping where the water balloon touches your skin during the treatment.

• The carefully focused shock waves will start to fragment the stone(s) over 30-45 minutes.

At home

Safety

• **Do not drive a car** for 24 hours. You must have someone to drive you home.

• **Do not drink alcohol** during the next 24 hours.

• **Do not sign legal documents** within the next 24 hours.

Controlling discomfort

• Mild pain may be treated with Tylenol® or Tylenol 1® (both available without a prescription).

• Soaking in a tub of warm water once or twice a day may help to relieve mild back pain.

• You may have some bruising on your back and you will probably have some blood in your urine for a few days.
Fluid intake
• Drink plenty of fluids for several days after your procedure as this will help you pass the stone fragments.

Activity
• You may go back to your usual activities after the blood in your urine has cleared.
• Mild exercise such as walking may help you pass the stone fragments.

Antibiotics
• You may need to take antibiotics if you have had problems with urinary tract infections.

Straining urine
• You must strain your urine for 3-4 days after treatment to collect stone fragments that are passed so that they can be tested at the lab. We will give you a strainer for this. You can also use paint strainers or coffee filters if you need extra strainers.
• Bring any stone particles with you when you have your next doctor’s appointment.
• Some people will not pass stone fragments until several weeks after the treatment. If this happens, you should still try to collect the stone fragments and save them for lab testing.
Call your family doctor if you have:
• A high fever (over 101°F or 38.5°C).
• Severe pain that is not relieved by pills (such as Tylenol® or Tylenol 1®).

Follow-up care
Arrangements have been made for you to have an X-ray and/or appointment to see your doctor:

Doctor: ______________________________

Date: ______________________________

Time: ______________________________

Place:
☐ Urology Clinic - Level 4 Halifax Infirmary
☐ Other ____________________________

If you have any questions, please ask.
We are here to help you.

If you need to see a doctor, please contact your family doctor or go to the nearest Emergency Department unless otherwise instructed by your urologist.
Notes: