

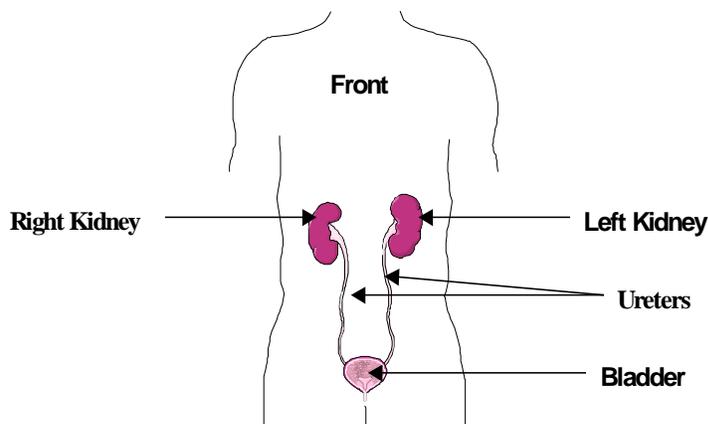
PATIENT INFORMATION

A publication of Jackson-Madison County General Hospital Surgical Services

EXTRACORPOREAL SHOCK WAVE LITHOTRIPSY (ESWL)

What is ESWL?

ESWL is a way to break up kidney stones inside the kidney using sound waves. High concentrations of x-rays or ultrasound are directed from a machine (called a lithotripter) outside the body to the stones inside. The shock waves break the stone(s) into tiny pieces, which are passed out of the body in the urine. No surgery is involved in ESWL. ESWL will not harm your other body tissues.



Where is ESWL done? How long does it take?

ESWL is done in the surgical department of the hospital. The procedure itself takes about 45 minutes to an hour. This does not include the time to and from surgery or waiting for the ESWL to start.

What do I need to do before my surgery?

- The doctor will explain the ESWL to you. You will be asked to sign a consent form to give the doctor permission to treat you.
- Shower the night before your surgery and the morning of your surgery with the special soap that you are given.
- Do not eat or drink anything after midnight the night before your surgery.
- Please do not chew gum. (This raises the level of acid in your stomach.)
- You may brush your teeth and rinse your mouth as long as you do not swallow any water.
- If you take medicine for your heart, blood pressure, or asthma you may take this with a small sip of water before you come to the hospital. If you take medicine and/or insulin for diabetes you need to ask your doctor if you should take this.
- Do not take anything with aspirin in it for one week before your surgery. If your surgery is scheduled for less than one week away stop taking your aspirin now.

- If you have a pacemaker, be sure that you tell your doctor.
- Remove all fingernail polish.
- Remove all jewelry including body piercings.
- Do not wear any makeup.
- If you will be checking into the hospital on the day of your surgery:
 - Bring all medicines that you are taking to the hospital with you.
 - Do not bring valuables or large amounts of money with you to the hospital.
 - Have a responsible adult drive you to the hospital and stay during your surgery. **You will not be allowed to drive yourself home.**

What can I expect the day of my surgery?

- If you are checking in on the day of your surgery, after you have been to the Admitting Office you will be taken to a room. This may not be the room where you will be taken after surgery.
- You will be given a hospital gown and asked to remove all of your clothes including underwear and socks. Put on the gown opening in the back.
- You will also be asked to remove all dentures, partial plates, prosthesis, hairpieces, jewelry (including body piercings), contact lenses, and glasses.
- You may be asked questions about your medical history. Some of these may be the same questions that you have already been asked. Please know that it is important that these questions be asked so that we can give you the best possible care.
- You may be taken to the Pre-Anesthesia Unit (PAU) to get ready for your surgery. If you are taken to PAU, you will be there for one to one and a half hours before your surgery. The nurse will tell your family where to wait.
- If you are prepared for surgery in PAU, you will have sticky pads put on your chest so the staff can watch your heart. A blood pressure cuff will be put on your arm so that your blood pressure can be checked. A device called a pulse oximeter will be put on your finger. This will tell how much oxygen is in your blood. If you do not go to PAU before your surgery, these things will be done in the operating room.
- You will have an IV (needle in your arm for fluids) started. You will be given medicine in the IV that will help you relax.
- Someone from anesthesia will talk with you before your surgery.
- When it is time for your surgery, you will be taken to the operating room. The room will be cold. The nurse will give you a warm blanket.
- You will be placed on a special table for the procedure.
- The staff in the operating room will include your doctor and his assistant, an anesthesiologist, a scrub nurse, and a circulating nurse. All of these people are there to take care of you and no one else.
- You will have a mask placed over your face. This will give you plenty of oxygen to breathe.
- Most people are asleep during the procedure. The anesthesiologist will give you medicine in your IV that will help you fall asleep. You will not feel any pain and you will not wake up during your surgery.

- A series of x-rays will guide the positioning of the lithotripter so that it is pointing directly toward your kidney stones. The lithotripter will direct shock waves to the kidney stone at a rate of about one wave per second.
- When the operation has started, the nurse will call your family. You will be in surgery for 45 minutes to one hour depending on the size and location of your stone.
- When the stone has been broken apart, the anesthetist will give you medicine in your IV that will help you to wake up. You will be taken to the Recovery Room. The doctor will talk with your family.
- When you wake up, you may have an oxygen mask over your face. When you are awake enough to take deep breaths this will be removed.
- There will be a nurse taking care of you in the Recovery Room. You will have your blood pressure, pulse, and oxygen level checked.
- During your surgery, the doctor may put in a stent. This is a tiny tube that holds your ureter (the tube from your kidney to your bladder) open. If you do have a stent, you may have a string coming from your urethra (the opening where you urinate). **Do Not Pull On This String!** The doctor will decide when your stent can be removed.
- If you are in pain or sick to your stomach please tell the nurse so that she can give you medicine.
- When you are more awake you will be taken to your room. There will be a nurse taking care of you. You will be given food and something to drink when you are awake and you do not feel sick at your stomach.
- Call for the nurse to help you the first time that you need to get out of the bed. **Do not try to get up without help.**
- You will notice blood tinged urine when you go to the bathroom. This is normal for about 24 to 36 hours. Some people who are passing stone fragments may have blood-tinged urine for up to one to two weeks. Those who have had a stent put in may have some blood-tinged urine for as long as they have the stent. Call the nurse or your doctor if there is a lot of blood or if you are concerned.
- Your back will be sore after the ESWL. You may notice bruising or redness in the area that was treated. Your doctor may prescribe a heating pad and mild pain medicine to help relieve the pain.
- Most people are able to go home later in the day.

Discharge Instructions for ESWL Patients

- The prescriptions that your doctor has written should be filled right away. If you are given an antibiotic prescription, you should take it as directed (even if you feel better) until it is completely gone.
- If you have slight pain or soreness, you may take Tylenol® (acetaminophen) if you are not allergic to it. If this does not control your pain, take your prescribed pain medicine as directed. Do not take aspirin or any product that contains aspirin for one week.
- If an appointment was not scheduled for you, make an appointment to see your urologist in one to two weeks. It is very important that you keep this appointment so that your doctor can check your kidney function and make sure that your treatment was successful.
- **You must have a responsible adult to drive you home.**

For the first 24 hours after going home:

- Rest at home with moderate activity. Rest is important after anesthesia. Do not take part in sports, jog, run, or ride a bike. No straining or heavy lifting for one week.
- Do not stay alone. A responsible adult should stay with you for the first day and night after your procedure.
- You may have some lightheadedness, dizziness, or sleepiness because of the medicines given to you during your procedure. Change positions from sitting to standing slowly.
- Have someone help you if you must go up or down stairs.
- Do not drive a motor vehicle, operate machinery, or use power tools for at least 24-48 hours.
- Do not drink any beverage containing alcohol, including beer. Check your temperature every four hours for at least 24 hours. If your temperature is more than 100.5° twice, call your doctor. This could indicate an infection or other problem.
- Pain medicines or the medicines used during your procedure may cause some people to feel nauseated (sick to your stomach). If you have nausea that is not controlled by your prescribed medicine, call your doctor.

Other instructions:

- Drink as many fluids (without caffeine or alcohol) as you can for several days after your procedure. Water is best. This will help to wash the particles out of your kidney. It is best to drink at least one eight-ounce glass every hour while you are awake.
- After the first 24 hours, walking is encouraged. This will also help you pass the particles.
- Your urine may be bloody for 24-36 hours. If you notice that the amount of blood in your urine increases, decrease your activity level and drink extra fluids. If the urine continues to be bloody or the amount of blood increases, call your doctor right away. Note: If you had a stent inserted, your urine may be bloody until it is removed.
- Your back may be sore for a few days after your procedure. Using a heating pad may help with this. Do not put it directly against your skin or go to sleep with it set above the low setting.
- Strain all of your urine until your doctor tells you it is no longer needed. Put any stone fragments in a closed container and take them with you to your next doctor's visit.
- You may pass stone fragments for two to three months or even longer. This is usually painless and patients usually do well during this time. Occasionally, however, because of where the stones are in the kidney or if they are large or jagged in shape, more than one ESWL treatment may be needed.
- If you are not doing well, do not hesitate to call your urologist.

Call Your Doctor If:

- Your temperature is 100.5° twice
- Your urine is very bloody
- Your urine is cloudy or has a bad odor
- ◆ You have continuous nausea or vomiting
- ◆ Your pain is not controlled by your pain medicines
- ◆ You have any other concerns