

Lithotripsy

at St. Joseph's Hospital

Extra-Corporeal Shockwave Lithotripsy (ESWL)

Lithotripsy defined:

Litho = stone

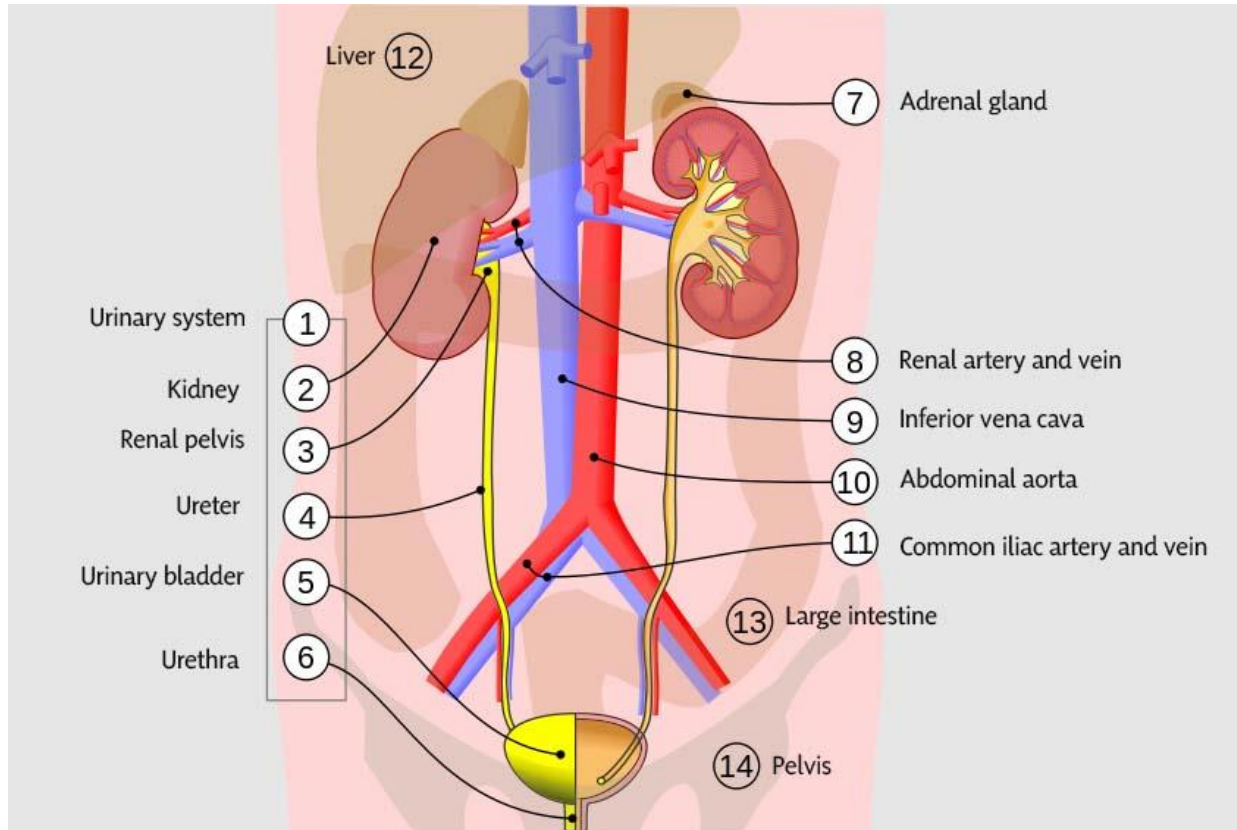
Tripsy = to break or to crush

- ESWL is a procedure where shock waves are generated from a machine and travel through the surface of the skin to a kidney stone without requiring surgery

Extra-Corporeal Shockwave Lithotripsy

- The purpose of lithotripsy is to break up stones to allow them to pass with minimal discomfort
- Lithotripsy will crush stones into small particles which will pass as fluids wash them through the urinary tract
- For this reason it is important to drink 8-10 glasses of fluid for the first 2-3 days after treatment – water is best
 - Minimize the intake of caffeine from coffee, tea, soda

Urinary System – the basics



- Normally a person has two kidneys and two ureters or drainage tubes which empty into the bladder
- From the bladder urine is passed through the urethra
- A kidney stone also known as a renal calculus can be located anywhere within your urinary system

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Ureteral Stent

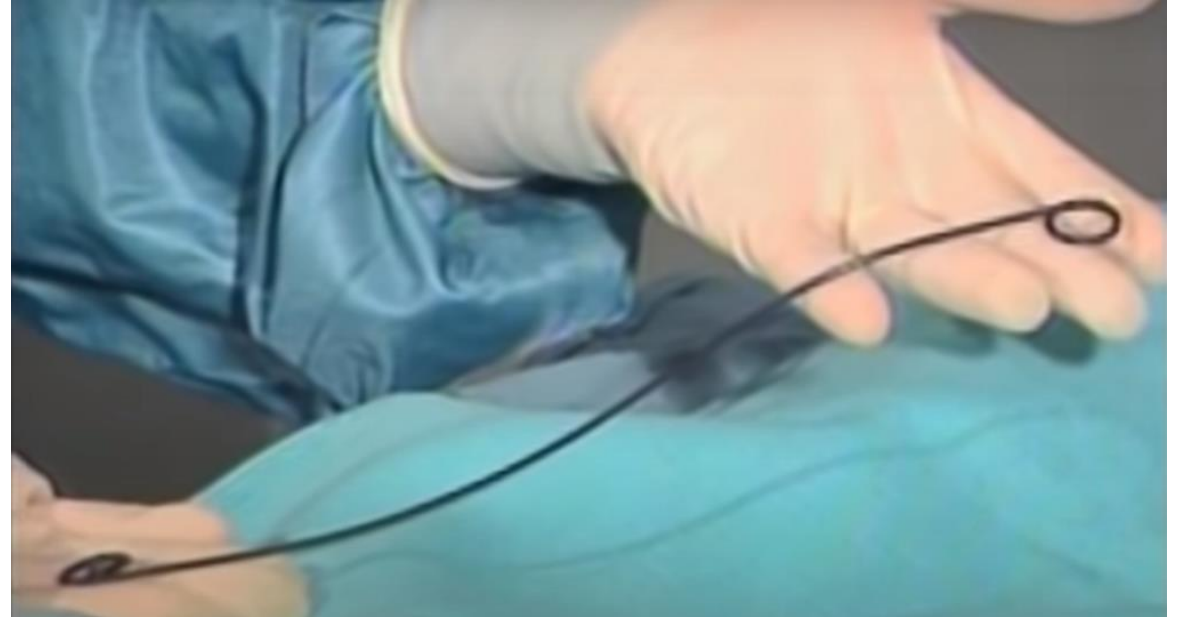
- A ureteral stent may be placed inside your ureter to prevent blockage from stone pieces and help urine drain from your kidney
 - This decision will be made the day of your lithotripsy by your urologist
 - In most cases the stent is left in for 7-14 days
- An x-ray is usually taken before the stent is removed to ensure the stone is well broken
- The stent will be removed or replaced by your urologist
- If you have a stent, you will be provided specific discharge instructions before you go home

Ureteral Stent

- A ureteral stent is a hollow rubber-like tube with a number of holes in it
- Placed in the ureter between your kidney and your bladder

It serves three purposes

1. To prevent severe pain caused by blockage of a kidney stone
2. To maintain flow of urine to the bladder
3. To help dilate or widen the ureter allowing stones to pass freely



Day of the Procedure

- Upon arrival to St. Joseph's Hospital you will register in the Admitting Department located in Zone C at C1-300
- You will be asked to wait close to the Surgical Day Care Unit where a nurse will come to escort you into the unit



In the Surgical Day Care Unit

- You will be required to change into a hospital gown and bottoms
- Your belongings will be placed in hospital provided-bags and stored in a locker when you go to the Operating Room
- You will have your vitals taken which include your blood pressure, pulse and temperature
- Your history will be reviewed including your medications, allergies and when you last ate and drank
- Discharge instructions will be reviewed so you know what to expect when you go home

Imaging

- You will go for an x-ray referred to as a KUB
- This means Kidney, Ureter, Bladder x-ray (KUB)
- The x-ray provides the urologist with a view of where the kidney stone is located

Prior to the Operating Room (OR)

- When you return from imaging, you will get onto the stretcher that will take you to the operating room
- An intravenous (IV) will be inserted to provide hydration while you wait
- Once you are in the OR the anesthetist will administer medication through the IV to make you comfortable and sleepy
- The IV will be removed after the procedure

Operating Room

- Once over in the operating room, you will meet your anesthetist and urologist prior to the procedure
- Both will speak with you and provide you information as well as ask about your medical history
- You will have an opportunity to ask questions before signing consent for the procedure
- You will then be taken into the Lithotripsy Suite and will be moved over to the lithotripter
- The procedure takes approximately 45 minutes

Procedure Video

- Here is a short [video](#) on lithotripsy at St. Joseph's Hospital

Post Anesthetic Care Unit (PACU)

- After the procedure you will go to PACU to be monitored which includes assessment of your breathing and vital signs
- Once you have woken up and your breathing and vital signs are stable you will be transferred back to the Surgical Day Care Unit to prepare to go home

Getting ready to go home

- In SDCU, you will have your vitals taken
- You will be given something to drink
- You will need to urinate prior to being able to go home
- You may need to strain your urine to collect any stone fragments that may pass, you may not see fragments right away and this is normal
- You may see large amounts of blood in your urine after the procedure, this is normal
- You will follow up with your own urologist as directed