

WHAT IS IVU?

IVU or intravenous urography is a radiological procedure used to visualise abnormalities of the urinary system, including the kidneys, ureter and bladder. In this test, contrast media is injected into bloodstream and a series of x-ray are then taken at timed intervals



INDICATION

- 1. Blood in the urine (haematuria)**
- 2. Suspected kidney stone**
- 3. Recurrent infection of the bladder or kidney**
- 4. To look for urinary tract damage following an abdominal injury**

CONTRAINDICATION

- 1. You are pregnant or possibility of pregnancy**
- 2. You have ever had a severe allergic reaction to contrast media or other iodine-containing substance**



PATIENT PREPARATION

- 1. Patient have to fasting 6 hour before examination.**
- 2. MOs will ask patient about medical history like allergies to food and medicine or history of any fever or asthma.**
- 3. For the female patient, dr or radiographer will ask the date of LMP (last menstrual period) to make sure patient not pregnant**



TROLLEY PREPARATION FOR IVU



PROCEDURE

- 1. Patient will be asked to pass urine before the examination.**
- 2. After that, change cloth and put on gown hospital**
- 3. A preliminary or control film is taken to assess if bowel is empty for the examination.**
- 4. Needle will be inserted into a vein. The contrast media is then injected through the needle.**





- 5. A series of film are taken after that. Usually 5 min after injection, 15 min after injection (compression or head down), release and lastly post mict.**
- 6. Compression or head down will decide by doctor depend to pathology or patient condition.**



After the examination is complete, patients can go home, can eat and drink normally.



INTRODUCTION

Extracorporeal shockwave lithotripsy (ESWL) uses shockwave to break a kidney stone into small pieces that can easily travel through the urinary tract and pass from the body





PROCEDURE

- 1. Patient can take local anesthetic**
- 2. Patient lie on a water-filled cushion, and the radiographer uses x-ray (radiopaque stone) or ultrasound (radiolucent stone) to locate the stone.**



3. High-energy sound wave pass through the body without injuring it and break the stone into small pieces. This small pieces move through the urinary tract and out of the body more easily than a large stone

4.The process take about 40 min.





- The surgeon may use a stent when the stone are large. This helps the small stone pieces to pass without blocking the ureter. A stent is a small, short tube of flexible plastic that hold the ureter open.

WHAT TO EXPECT AFTER TREATMENT

- **ESWL is usually an outpatient procedure and patient can go home after that.**
- **It may take a few days or week for all the stone fragments to pass from the body. Patient may have mild pain as the small fragment pass through the urinary tract.**
- **Low intensity cause less discomfort, but patient may need more treatments before the stone is broken into pieces small.**

