

Procedure Information

Intracorporeal Lithotripsy

Introduction

Urinary stones are reached directly by endoscopy. Laser or pneumatic lithotripsy is applied through the endoscope. Stone fragments are removed through the endoscope by instruments or allowed to pass spontaneously. Depending to the size and location of the stone, two treatments can be used. There are Ureteroscopic Lithotripsy and Percutaneous Nephrolithotomy.

Indications

1. Ureteroscopic Lithotripsy
It is suitable for ureteric stone especially those located at distal ureter.
2. Percutaneous Nephrolithotomy
It is suitable for big renal stone and upper ureteric stones.

Procedures

1. Ureteroscopic Lithotripsy:
 - The procedure is performed under spinal or general anaesthesia.
 - A fine semirigid or flexible fiberoptic ureteroscope is introduced into the affected ureter via the urethra and bladder.
 - The stone is identified and broken down.
 - The fragmented stones are removed by using either a basket or forcep, or allowed to pass spontaneously.
 - A ureteric drain may be inserted if necessary.
2. Percutaneous Nephroscopic Lithotripsy:
 - The procedure is performed under general anesthesia.
 - The affected kidney is punctured to allow the introduction of nephroscope into the pelvicalyceal system through the X-ray.
 - The stone will then be fragmented and removed through the nephroscope.
 - The fragmented stones are removed by using either a basket or forcep, or allowed to pass spontaneously.
 - A nephrostomy tube is inserted to allow urine drainage.

Possible Risks and Complications

1. Ureteroscopic Lithotripsy
 - Voiding difficulty and voiding of blood stained urine if an ureteric stent is inserted.
 - Pain over the loin, lower abdomen for the first few days after the procedure is expected.
 - Urinary tract infection.
2. Percutaneous Nephroscopic Lithotripsy
 - Voiding of blood stained urine
 - Pain induced by the nephrostomy
 - Urinary tract infection
 - Perforation of the renal pelvis
 - Massive bleeding due to renal vessels damage

** The risks listed above are in general terms and the possibility of complications is not exhaustive. You should understand that even though all procedures are carried out with utmost professionalism and care this does not rule out the possibility of complications arising.

Pre-procedure Preparations

1. The procedures and possible complications will be explained by the doctor and a consent form must be signed prior to the procedure.
2. Eating and drinking should be avoided for **at least six hours before** the operation. (For general anaesthesia).
3. Routine test such as x-ray or blood test etc. may be performed.
4. You should inform the doctor if you have any medical conditions (e.g. diabetes mellitus, heart disease, hypertension etc.) and taking any regular medications (e.g. Aspirin, Warfarin, Plavix, Xarelto, Dabigatran, herbs and dietary supplement).
5. You should change into a surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
6. You should ensure your bladder is empty before the procedure.

Post-procedure Instructions

Ureteroscopic Lithotripsy

1. After general anesthesia, the patient may:
 - experience discomfort in the throat after tracheal intubation.
 - experience side effects of anesthesia including feel tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
2. You are advised to drink 3-4 litres of water per day to increase the urine output to 2-3 litres a day. This will facilitate the passage of stones.
3. Stone formation may be prevented by a well-balanced diet of high fibre, low salt, low fat and low sugar.
4. Most patients can be discharged a few hours after the procedure.

Percutaneous Nephroscopic Lithotripsy

1. After general anesthesia, you may:
 - experience discomfort in the throat after tracheal intubation.
 - experience side effects of anesthesia including feel tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
2. Urethral catheter is usually removed one day after the procedure. Nephrostomy tube will be removed according to the postoperative course.
3. Wound will heal up about one week after removal of the nephrostomy tube.
4. You are advised to drink 3-4 litres of water per day to increase the urine output to 2-3 litres a day. This will facilitate the passage of stones.
5. Stone formation may be prevented by a well-balanced diet of high fibre, low salt, low fat and low sugar.

Advices on Discharge

1. Prescribed pain medication may be taken as needed.
2. You should immediately return to the doctor or hospital for professional attention in the event of severe pain, persistent fever, difficulty in urinating, shivering, fever over 38°C or 100°F, etc.
3. Any follow-up consultations should be attended as scheduled.

Should there be any enquiries or concerns, please consult the attending doctor. The attending doctor will be pleased to answer such enquiries and explain to you.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

Compiled by Union Hospital Consent Form Committee

The above information is for reference only, please enquire your physician for details
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification

