



## Procedure Information Sheet

### Introduction

PCNL is one of the treatment options for renal stone and ureteric stone disease. As a minimally invasive procedure, it involves the passing of a medical instrument through the skin into your kidney to remove the stones.

### The Operation / Procedure

1. X ray guidance is required throughout the operation.
2. Doctor will perform endoscopy within your bladder and pass a catheter into the ureter for injection of contrast material.
3. Doctor will make a small cut on your back and pass a needle through the skin to the kidney. The needle tract will be dilated.
4. Instruments would be passed through the dilated tract and doctor will use these to break the stone and take them out.
5. After the operation, a tube is placed into the kidney and urinary catheter is generally required.

### Before the Operation / Procedure

1. Inform doctor if you are pregnant.
2. Inform doctor of any medical condition, for example diabetes, heart diseases, high blood pressure etc) and any medications you are currently taking. (for example aspirin or blood thinner, may need to stop for a period before operation)
3. Discuss with doctor in charge about the operation management, nature of operation and possible risks. Read through and understood this information sheet and complete the consent form.
4. You would be assessed for your medical fitness for the procedure by your doctor, including a series of blood tests, urine tests, electrocardiogram (ECG) and X-ray examinations.
5. Pre-operative anesthetic assessment about the anesthetic management, nature of anesthetic and possible risks and complete the anesthetic consent form.
6. Keep fast for 6-8 hours before operation to avoid risk of aspiration (or as specified by your doctor).
7. Your doctor will tell you whether you should continue your regular medications during the fasting period or may give you other instructions.
8. Preventive antibiotics therapy would be given to reduce risk of infection.
9. Follow doctor's advice for pre-medication.
10. Change to operation gown, socks and cap, remove underwaer, denture, contact lens and jewellery (including hair pins, ear rings and ring etc.).
11. Empty bladder before transfer to Operating Theater.

### After the Operation / Procedure

1. Doctors and nurses will closely monitor your blood pressure, pulse, and signs of bleeding and level of pain.
2. You can expect mild pain at the incision area.
3. You may have intravenous fluid given and doctor will put you back to normal diet when your conditions have improved.
4. Encouraged to do deep breathing and coughing exercise to prevent chest infection.
5. Blood stained urine is expected coming out from the kidney drain and the urinary catheter for a few days.
6. Kidney drainage tube and urinary catheter will be removed as soon as it is indicated.
7. Patient will be discharged when considered appropriate. Please follow the instructions for wound care and for follow up given upon discharge.

#### Patient's Label

Patient Name: \_\_\_\_\_

Hospital No: \_\_\_\_\_

Episode No: \_\_\_\_\_



### Risk and Complication

Like other invasive procedures, PCNL have some risks:

1. Common Risks and Complications
  - 1.1. Bleeding
  - 1.2. Infection
  - 1.3. Wound pain
  - 1.4. Residual stone fragments requiring additional or ancillary procedures
2. Uncommon Risks & Serious Consequences
  - 2.1 Injury to adjacent organ, including perforation of gastrointestinal tract (< 1%), pleural cavity and lungs ( 1-3% ), spleen and liver
  - 2.2 Unintended perforation of urinary tract
  - 2.3 Bleeding causing haematoma and clot retention, that requires blood transfusion (10-30%), Surgical intervention (1-3%) and possibility of nephrectomy.
  - 2.4 Failed percutaneous access or stone retrieval, ureteric obstruction due to stone fragment
  - 2.5 Conversion to open surgery or other interventional procedure
  - 2.6 Sepsis (1-2%)
  - 2.7 Impairment or loss of kidney function
  - 2.8 Mortality (< 0.5%)
  - 2.9 This list is not exhaustive and rare complication cannot be listed, please contact your doctor if any queries.

### Disclaimer

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

### Reference

Hospital Authority Coordinating Committee in Surgery: Percutaneous Nephrolithotripsy (PCNL) (2018)

Patient's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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