



## 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 then 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 urine 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 and any medications you take.
3. You would be assessed for your medical fitness for the procedure by your doctor.
4. You will have a series of check-ups including blood tests, urine tests and X ray tests.
5. You must not eat or drink anything at least 6 hours before the procedure (or as specified by your doctor).
6. Your doctor will tell you whether you should continue your regular medications during the fasting period or may give you other instructions.
7. Preventive antibiotics therapy would be given to reduce risk of infection.

### 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. You are 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 urine catheter for a few days.
6. Kidney drainage tube and urine 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.

### 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. Injury to urinary tract.
  - 2.3. Bleeding causing haematoma and clot retention, that requires blood transfusion (10-30%), radiological or 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 complications cannot be listed, please contact your doctor if any queries.

#### Patient's Label

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

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

Adm No/Episode No: \_\_\_\_\_



**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**

Smart Patient Website by Hospital Authority: Percutaneous Nephrolithotripsy (PCNL) (2013)

<p><b>Patient's Label</b>          Patient Name: _____          Hospital No: _____          Adm No/Episode No: _____</p>
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Patient's Signature: \_\_\_\_\_ Date: \_\_\_\_\_