

A Guide for Patients and Families **Renal Biopsy** 

### What is a renal biopsy?

Renal Biopsy is a procedure where a tissue sample from the kidney is obtained for tests and analysis. This is necessary to evaluate the cause of reduced kidney function, persistent blood or protein in the urine and for people who have just undergone a kidney transplant.

#### Investigation, test and procedures:

The biopsy will be carried out while you lie in a face-down position. The kidney is then located using an ultrasound machine. Local anaesthesia will be given to numb the skin at the biopsy site so that a tiny incision can be made. You will be fully conscious during the procedure and will be asked to take a deep breath and hold the breath while the needle is inserted into the kidney to obtain the required tissue sample.



# What should you expect after the procedure?

Following the biopsy, you must remain lying on your front for at least one hour and are recommended to be on strict bed rest for at least six hours.





Blood pressure, pulse rate, urine colour and symptoms will be monitored during this time. Activity following discharge should be restricted and intensive physical exercise should be avoided for at least four weeks.

You are encouraged to drink plenty of fluids to increase urine flow rate as this can help in preventing ureteral obstruction due to blood clots.



# Complications (if any):

#### Bleeding

- Bleeding is a major complication associated with this procedure.
- Transient microscopic haematuria (presence of blood in the urine not visible to the naked eye) occurs in most patients, which usually resolves in about 48 hours.
- Occasionally, transient gross haematuria (visible presence of blood in the urine) can occur days after biopsy, which usually resolves with sufficient rest. The incidence is approximately 1 in 20- 50. It is rarely severe enough to warrant a blood transfusion.
- Perinephric haematoma (bleeding around the kidney) is usually occult (not visible to the naked eye) and associated with a fall in haemoglobin and is sometimes manifested by flank pain and swelling.
- In very rare cases, surgery (nephrectomy
  - removal of the kidney) may be required
  to control the bleeding.
- To avoid any risk of bleeding, please inform your doctor if you have a bleeding abnormality, are on aspirin or any other non-steroidal anti-inflammatory drugs for the last 7 days or have been taking any medications that reduce the clotting ability of blood.







## Pain

You may feel some pain during this procedure as there is an incision. Pain lasting more than 12 hours can occur and this may be due to ureteral obstruction from a blood clot in patients with gross haematuria or a subcapsular haematoma (clot) stretching the renal capsule. Report your pain symptoms to your doctor so that your doctor can evaluate your condition.

## Infection

Urinary tract infection can occur in a minority of patients but this happens more often in patients with an active renal infection. The development of systemic infection can occur although it is uncommon.





