

Standard Operating Procedure for pre/post renal biopsy

A renal biopsy is performed aseptically under a general anaesthetic, the patient will be placed in the prone position and, using a needle, a microscopic section of the kidney will be taken and examined for abnormalities. A biopsy may be necessary in acute or chronic kidney disease where there is not a clear cause; if a child has abnormal blood results; if there is blood or protein in the child's urine or in the diagnosis of Nephrotic Syndrome or Glomerular Disease. A biopsy can also show if there has been any permanent damage to the kidney. A transplant patient might need a renal biopsy if there is suspected rejection or if the kidney is not working as well as it should be, this will show the problem and help to decide on further treatment.

Pre op

- 1.** Clarify fasting times and make sure the patient/parent is aware of the fasting times and rules. e.g. if the patient is going in the morning the patient will be fasting 3 and 6 meaning no solids after 3am, clear fluids only up to 6am then nil by mouth until post op.
- 2.** If the patient has a urine output they must get a urinalysis done and 2 samples obtained, 1 to be sent for a PCR (white top) and 1 kept on ward to compare against post op sample.
- 3.** A theatre pack must be made up for the patient including a completed checklist. If this is filled out by a student nurse it must be checked by a staff nurse.
- 4.** A full set of observations must be obtained including a blood pressure.
- 5.** A pathology form needs to be sent down to theatre with the patient, this is obtained on trakcare.
- 6.** Check that the patient has IV access, if not they need to have emla cream applied before going to theatre for anaesthetic.
- 7.** Check trakcare to see if the patient has had bloods done, if not then clarify with medical team whether these need to be done before theatre.

Post op

1. Immediately post op the patient must be put on continuous monitoring and have a full set of observations obtained. Thereafter observations are to be obtained as follows:

Every 15mins for 1 hour.

Every 30mins for 2 hours.

Hourly for 4 hours.

2 hourly for 6 hours.

4 hourly thereafter.

Any significant change in the observations should be reported to medical staff, or in the case of a student nurse report this to a staff nurse.

2. The patient must remain on bed rest, preferably lying flat to a 45 degree angle in bed for 4-6 hours post op. The patient is allowed up for the toilet.

3. All urine output must be obtained in bedpans/bottles. A sample from each urine output must be obtained and monitored for any clots. White top urine bottles should be filled to provide a range of urine output post op. At first the urine may be haematuric but it should gradually start to clear. If it continues to be haematuric, inform medical staff.

If there is a clot in the urine, inform a staff nurse/medical staff. If the patient is awake they should be encouraged to drink clear fluids as this will help to clear the urine and flush out any clots. The patient may need to be started on IV fluids following medical review.

4. The biopsy site should have a dry dressing applied and needs to be monitored for any bleeding or swelling with each set of observation.