

# Renal biopsy

Patients are admitted on day of procedure, or earlier if less fit. Must be arranged in advance via ultrasound sec or by discussin with radiologist who has a list. If deemed suitable for day care, can be assessed by Clinical Nurse Practitioner. If admitted to general wards to be assessed by medical staff.

## Pre-procedure

- aspirin/clopidogrel stop 1 week in advance; other NSAIDs omitted on the day
- warfarin stop AT LEAST 2 days in advance if indication permits. Some patients will need iv heparin until day of biopsy
- all medications including anti-hypertensives and anti-anginals to continue (usually patients' own supply)
- pathology request form must be filled in by renal team and attached to front of notes. Do same with consent form if obtained in advance
- Fluids only for 2 hours prior to procedure but no need to fast

## Investigations and observations

Ensure no major change in condition or therapy (seek advice if there is)

- BP should be <160/90

Recent results for the following must be available:

- FBC (Hb must be > 80 g/l, Pts > 100×10<sup>12</sup>/l)
- coag screen ( PT and APTT must be within 3 seconds of control value)
- Group and save
- U & E in patients on dialysis, or if uraemic
- if any values are outwith these ranges the Registrar and the radiologist should be informed

## Consent

Consent is obtained jointly by the referring nephrologist and the practitioner (usually a radiologist) performing the biopsy. We therefore use a dedicated

consent form ([download pdf here](#)). The top part is completed by the nephrologist; the bottom part by the radiologist. This should be attached to the front of the case-notes next to the pathology form so that it is easily accessible to the radiologist performing the biopsy.

## Post-procedure

- bed rest 6hrs: first 2h lying flat
- pulse and BP:
  - half-hourly for 2 hours
  - then hourly for 2 hours
  - at 6h, then 6-hourly to 24h if still an in-patient
- advise patient to drink plenty
- pain relief: paracetamol is adequate in most instances
- assess and document:
  - biopsy site
  - presence/absence of haematuria (macroscopically only)
  - dialysis or uraemic patients: check [K] the following day
- Aspirin and warfarin can be restarted the following day if uncomplicated
- Discuss reintroduction of heparin if patient at high risk of thrombosis

## Discharge

At the agreed time if all the above satisfactory. Minimum is 6h if suitable for day-case biopsy, see below. In all cases:

- patient must have passed urine
- 6h or final BP must have been recorded
- patient must have been given a number to call if problems (renal ward or doctor)
- results usually given at an outpatient appointment in the near future
- returning to work and other activities: a day or two off work is usually enough. Heavy manual activities should be avoided for a few days. No other special precautions are required.

## Day case biopsies

These are suitable if the following conditions can be met:

|                            |   |
|----------------------------|---|
| <i>Inclusion criteria:</i> | <p>Low risk</p> <p>Suitable responsible person at home</p> <p>Can arrange own transport for evening discharge</p> |
| <i>Exclusion criteria:</i> | <p>Anticoagulation</p> <p>Creatinine &gt;250 micromol/l</p> <p>Serious comorbid disease</p>                       |

Diabetes mellitus does not automatically exclude day case biopsy as there is no requirement to fast.

Patients must have an appropriately early biopsy.

**Urgent biopsies** - warn renal pathologist

**Out of hours procedures** - contact the consultant pathologist first

## Further information

[Patient information explaining renal biopsy](#) is available from [EdRenINFO](#)

**Acknowledgements:** Angela Webster and Paul Allan were the main authors for this page. It was later reviewed by Anne Petherick. The last modified date is shown in the footer.