HAEMODIALYSIS – MANAGEMENT OF THE PATIENT RECEIVING

Cross references (including NSW Health/SESIAHS policy directives) | NSW Health PD2007_079 Correct Patient, Correct Procedure and Correct Site
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1. What it is | A clinical business rule to describe the process for the management of admitted patients who require haemodialysis treatments.

2. Employees it applies to | Nurses and medical staff across St George and Sutherland Hospitals

3. When to use it | When a patient is admitted to the ward/unit with end stage kidney disease or acute kidney injury and requires haemodialysis treatments

4. Why the rule is necessary | To ensure safe and timely management of haemodialysis treatments.

5. Who is responsible | Nursing Co-Director of Medicine, Cardiac & Respiratory Nursing Unit Manager

6.1 Background
Haemodialysis is routinely performed on 4 West and in acute areas within the St George Hospital. The Sutherland Satellite Unit provides treatments for outpatients only. Patients admitted to The Sutherland Hospital will need to transfer to St George Hospital for inpatient haemodialysis.

The haemodialysis service operates from 0700hrs to 2130hrs Monday to Saturday. An on call service is available after these hours and on Sundays.

Haemodialysis is normally required 4-5 hours/3 days a week. Patients having dialysis in the morning are required to be on 4 West between 0730 and 0830. Patients on the afternoon shift need to arrive between 1400 and 1430. The staff on 4 West will advise the wards the evening prior as to the time that haemodialysis has been scheduled.

6.2 Preparation of the patient
- Early breakfast if on morning list, administer insulin if diabetic.
- Some medications should be withheld prior to haemodialysis, however, this is an individual decision for every patient e.g. some need antihypertensives withheld whilst for others their antihypertensives are mandatory. The dialysis nurses will advise which medications to withhold.
- Never withhold antiarrhythmics or cardiac medications such as Digoxin or Amiodarone as this can cause the patient to have cardiac symptoms on dialysis.
- Forms for blood tests should accompany the patient, as it is simple to take bloods at the start of dialysis avoiding additional venepunctures. In general, haemodialysis patients should only have blood collected on dialysis and not in the wards. Coagulation specimens cannot be collected via vascaths due to heparin in lumens.
- Where possible any blood transfusions should be planned to occur during haemodialysis, as patients are less likely to become fluid overloaded and access is easier. If possible, arrange for the crossmatch to be performed prior to dialysis.

Please contact the unit if there are any patient issues the haemodialysis staff should know about such as if the patient is confused or has a MRO. If the patient is scheduled for surgery or radiology procedures, notify the 4 west staff that the patient must remain fasting and the haemodialysis nurses can modify the haemodialysis regime accordingly.
6.3 During haemodialysis
While the patient is on 4 west they will be monitored closely. The emphasis of care is the
haemodialysis treatment, and routine clinical care such as dressings will need to be performed before
or after the dialysis treatment. Oral and IV medications and insulin will be administered but they must
be sent with the patient to the dialysis unit.

6.4 Post haemodialysis
The haemodialysis nurses will provide a verbal report on any adverse events or problems and a
comprehensive report in the continuation notes following the treatment. On return to the ward be
aware of the following:
- Check postural BP prior to the patient standing.
- In the majority of cases the patient will have received anticoagulation during the haemodialysis
treatment. Removal of drains, cannulae, sutures etc should be delayed for at least four hours.
- Blood tests will be inaccurate if performed immediately following dialysis and should be
delayed for about 4 hours. This is particularly important for serum potassium measurements
which can be falsely low.

6.5 On call haemodialysis service
If after hours dialysis is required for a patient, the medical registrar or renal consultant will organise
directly with the on call dialysis nurse through the hospital switchboard. Before the on call nurse is
called, the patient must be reviewed by the renal or medical registrar or consultant and vascular
access arranged. Patients should have vascular access ready for use and if they do not have a fistula
or graft a vascath will be inserted.

6.6 AV Fistula
- Patients with AV fistula type vascular access must not have blood pressure, blood sampling or
IV cannulae in that limb.
- At the commencement of dialysis the patient will have two needles inserted into their fistula.
The patient will return with a gauze dressing applied to the two puncture sites. These
dressings can be removed 4 hours after dialysis and left exposed.
- If there is excessive or continued bleeding from the sites gentle pressure should be applied to
stem the bleeding.
- Do not bandage or place a hospital ID band on the fistula limb as this will impede blood flow
and may clot the fistula.
- AV fistula function is checked by placing two fingers over the surgical site and feeling for an
electrical type of pulse/vibration (thrill) or listening for a whooshing sound (bruit) at the same
site.
- If the fistula is not working please contact the Vascular Access Nurse (p310), 4 west or the
Renal Registrar immediately.

6.7 Vascath
- The vascath must NOT be accessed for the administration of drugs, IV fluids, monitoring or
taking routine blood specimens.
- If the vascath is to be accessed for any reason or a problem occurs please contact the
Vascular Access Nurse (p.310), 4 West or 4 south staff.
- The haemodialysis unit staff will dress and care for the vascath.
- The vascath is not to be wet in the shower; instead a plastic shower cover should be given to
the patient to protect the entire catheter during showering. Covers are obtained from 4 West.
- Brochures available from 4 West or the St George Hospital intranet on both forms of access.
Please note that vascular access (vascath or AV fistula) is the link or lifeline to the dialysis machine.
for these patients.

6.8 Contacts for assistance
NUM/nursing staff 4 West St George ext. 31151 /31141
Renal CNC p.843
Renal Vascular Access Nurse p.310

7. Compliance evaluation

| Q1: What general preparation is required prior to a patient having a haemodialysis treatment? | A: Early breakfast if on morning list, administer insulin if diabetic, some medications may be withheld, send any blood forms, handover to haemodialysis nurses. |
| Q2: Who can access a haemodialysis vascath? | A: The Vascular Access Nurse (p310), haemodialysis nurses or trained 4 south nurses only. |
| Q3: What precautions should be taken when a patient has an AV fistula? | A: Must not have blood pressure, blood sampling or IV cannulae in that limb. Do not bandage or place a hospital ID band on the fistula limb as this will impede blood flow and may clot the fistula. Check for function regularly. |

8. Keywords
Haemodialysis, dialysis, AV fistula, vascath

9. External references
- Johnson CA (2009) *Dialysis of Drugs* Amgen Australia

I, Lauren Nelson Nursing Co-Director Medicine, Cardiac and Respiratory attest that this clinical business rule is not in contravention of any legislation, industrial award or policy directive.

Revision and approval history

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