FLUID MANAGEMENT GUIDELINES  
Haemodialysis patients

Fluid management is an important aspect of the care of patients requiring haemodialysis. These guidelines are to be used in conjunction with the fluid assessment protocol, learning package and competency.

Primary nurse interventions
- Patients must have a comprehensive fluid assessment by his/her primary nurse monthly prn (see fluid assessment protocol).
- It is also the primary nurses’ role to provide orientation and ongoing support for fluid management issues including education.
- Education regarding fluid management must be performed when patients start haemodialysis.
  o Orientation package must be given to new patients and includes the fluid patient education materials.
  o All patients starting dialysis must have a referral to the renal dietitian.
  o A pamphlet on tips for fluid management is available and should be given and explained to all patients.
- Primary nurse must document a maximum fluid off on the haemodialysis care plan.

Use of technology
Strategies which can be used in the safe removal of fluid can be initiated and include:

1. **Adjustment of dry weight**  (see protocol for fluid assessment)

2. **Profiling**- Can be implemented to provide a more physiological shift of fluid and solute which provides for better blood pressure stability and a reduction in dialysis symptoms. Sodium profiling leads to the maintenance of an osmotic gradient in the intravascular space promoting vascular refilling and prevention of hypotension. In our unit profiling can be used as a tool to manage unstable patients. Profiling must be done individually.

3. **BVS**- Blood volume sensing based on the reducing viscosity of blood with fluid removal. BVS is used to help determine more accurately a patient’s dry weight and the amount of fluid which can be safely removed without adverse effects. Need to track patient response to treatment over at least 5 sessions (See protocols for BVS).

4. **Isolated UF**-
Sequential dialysis or isolated UF (IUF) can be used as a means of removing fluid while maintaining haemodynamic stability.
   - Where possible IUF should be conducted at the start of the dialysis session with the aim of removing no more than three litres in total and no more than 2 litres per hour. IUF will remove fluid rapidly from the intravascular space. Plasma refill will not keep up with fluid loss if large volumes are taken off quickly. This will result in a haemodynamically unstable patient and chest pain. Fluid can be removed using IUF and the remaining can be taken off more slowly during dialysis.
Patients should not be on IUF for longer than 90 minutes at a time as hypothermia may occur as the dialysate is in bypass. Where it is known or suspected that the K is higher than 5mmol, IUF should be performed after at least one hour of dialysis. The IUF should be followed by the full number of dialysis hours normally prescribed for the patient. IUF should not be used as a chronic strategy as it may encourage some patients to drink more on a regular basis. Should be used for symptom control only.

Removal of fluid during haemodialysis
- Fluid removal during haemodialysis is individual and depends on the body size and usual stability of the patient during dialysis sessions.
- Patients should be counseled and educated to put no more than 2kg on between haemodialysis sessions.
- Fluid removal should be no more than a litre an hour maximum and in some cases it will be necessary to increase dialysis hours.
- When large volumes of fluid removal is indicated or where it is known that the patient does not tolerate fluid off very well, regular BP monitoring during dialysis may be indicated.

Support strategies
- Excessive fluid overload by the patient should never be encouraged especially if the patient has received counseling from the dietitian.
- The PN should explore the patient’s understanding of a fluid restriction and assist with compliance strategies where possible (see brochure).

References