

In-Patient Hemodialysis and Hemofiltration Information Sheet

General Indications for the treatment: Hemodialysis and hemofiltration are methods of cleaning the blood and removing extra fluid from the body when the kidneys cannot perform these functions well enough. If the patient is already receiving hemodialysis on a regular basis as an out-patient, this artificial kidney treatment will be similar to what the patient has received before.

Description of the procedure: The hemodialysis or hemofiltration machine pumps the patient's blood through a filter that cleans the blood and pulls off any excess fluid. Hemodialysis treatments can last 1-4 hours while hemofiltration treatments can last as long as 10 hours. If the patient is new to hemodialysis or is to receive hemofiltration, the patient will likely have had a dialysis catheter already placed into one of the large blood veins. This catheter has two ports, one for pulling the blood out of the body and one for returning it after the blood has passed been cleaned. If not new to hemodialysis the patient may have a graft or fistula in the arm or leg. In that case we put two needles into the graft or fistula, one for pulling and the other for returning the blood. The patient may receive blood thinners during the treatment to help prevent blood from clotting while it is passing through the filter. The patient will be required to stay in bed and not move around during the treatment. A dialysis technician will be in the room the entire treatment for hemodialysis.

Material risks and benefits of the procedure: The dialysis treatment will significantly clean the blood and may remove many quarts of excess fluid from the body. The patient may or may not feel or breathe better following the treatment. Hemodialysis and hemofiltration are generally painless (except for putting the needles into the fistula or graft if used), in fact the patient will likely feel nothing during the treatment but may feel tired for several hours after the procedure. In some cases patients may have side-effects. If these are to occur they almost always occur only while receiving the treatment. Some of these side-effects include:

- 1) Dizziness, muscle cramps, nausea, vomiting or low blood pressure: These are related to fluid removal during the treatment. The technician monitors the blood pressure and these symptoms, and if they develop will likely stop removing fluid, give some fluid back, or both. This usually takes care of these symptoms.
- 2) Bleeding: The doctor will try to avoid blood thinners if possible, but if they are felt necessary will use as low a dose as possible. Blood thinners increase the risk of bleeding anywhere in the body but this is uncommon while on hemodialysis and can be usually reversed with plasma if needed.
- 3) Other less common side-effects:
 - a. Seizures: These are rare and are usually only seen in someone who has had seizures before.
 - b. Heart rhythm problems: These are unpredictable in most cases, but are also rare. If in an intensive care unit the patient may be on a heart monitor during the treatment.
 - c. Death: This is extremely uncommon, and in most circumstances seems to have nothing to do with the hemodialysis treatment itself.

Procedure Alternatives: none, the doctor will decide whether or not the patient is better suited for hemodialysis or hemofiltration.

Possible consequences of refusing the procedure: Loss of appetite, confusion, muscle cramps, itching. Also life threatening complications include heart failure, irregular heart rhythms and fluid around the heart.

Person providing the treatment: A dialysis technician. If there are any questions before or during the hemodialysis treatment, feel free to speak to the technician. If needed, the technician can call a nurse or doctor to discuss the treatment with the patient.