

# Haemodialysis

## Teaching Material



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## What is Haemodialysis?

Haemodialysis is a procedure in which a machine filters & balance harmful waste, excess salt and fluid from your blood. It also balanced electrolyte as per body requirement.

## What is the purpose of Haemodialysis?

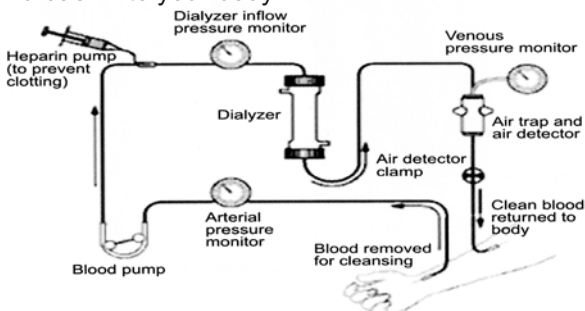
- To control fluid balance
- To normalise serum potassium levels
- To reverse metabolic acidosis
- To control uremic manifestations.

## What are the major indications for Haemodialysis?

- Increased level of potassium
- Fluid overload
- Severe acidosis
- Increase amount of waste product in the blood.

## How does dialysis work?

Haemodialysis uses a special filter (Dialyzer or artificial kidney), to clean your blood. During treatment, your blood travels through tubes into the filter which is connected to a machine. The dialyzer filters out wastes and extra fluids from the blood. Then; newly cleaned blood flows through another set of tubes and back into your body.

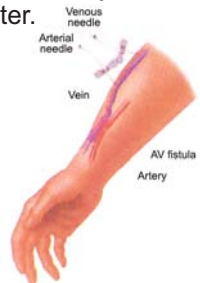


## What are different accesses available for Haemodialysis?

There are three basic kinds of vascular accesses for haemodialysis: an Arteriovenous (AV) fistula, an AV graft, and a venous catheter.

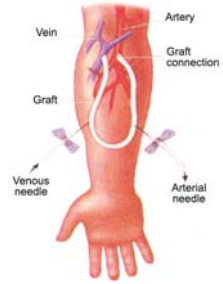
### Arteriovenous Fistula

A fistula is an opening or connection between any two blood vessels of the body that are usually separate. The fistula connects the artery to the vein, and so causes more blood to flow into the vein. As a result, the vein grows larger and stronger, making repeated insertions for hemodialysis treatments easier.



## Arteriovenous Graft

In AV graft, a synthetic tube is implanted under the skin in the arm. The tube becomes an artificial vein that can be used repeatedly for needle placement and blood access during hemodialysis.



## Venous Catheter for Temporary Access/ Joe Catheter

A catheter is a tube inserted into a vein in your neck, chest, or leg near the groin. It has two chambers to allow two-way flow of blood. It is a temporary access and can develop infection easily. It is removed as soon as the fistula is ready to use. It can be in place for a maximum period of six weeks, depending upon the site where it is inserted and the possible development of infection.



## How can you Take Care of Your Access?

You can do several things to protect your access, namely:

- Make sure your nurse or technician checks your access before each treatment.
- Keep your access clean at all time.
- Use your access site only for dialysis.
- Be careful not to bump or cut your access.
- Do not let anyone put a blood pressure cuff on your access arm.
- Do not wear jewelry or tight clothes over your access site.
- Do not sleep with your access arm under your head or body.
- Don't lift heavy objects or put pressure on your access arm.
- Check the pulse in your access every day.

## What is the importance of Dialysis?

Dialysis is a life-saving treatment; it carries out major functions of kidneys when they are no more functioning, and is needed when your own kidneys can no longer take care of your body's needs. It is important to restore normal kidney function. When patients have mild kidney failure they do not require dialysis - it is treated with medication. But when more than 85 per cent of kidney loss is temporary such as during an infection or excessive blood loss.

## Is dialysis uncomfortable?

You may have some discomfort when the needles are put into your fistula or graft, but most patients have no other problems. The dialysis treatment itself is painless. However, you may have a drop in blood pressure. If this happens, you feel Abdominal Pain, vomit, or have a headache or cramps. With frequent treatments, those problems usually go away. A cardiac monitor will be attached throughout the dialysis to monitor your heart rate, pulse and blood pressure. Furthermore, you will be continuously monitored by a dialysis nurse and technician who will take care of you during the treatment.

## How long do Haemodialysis treatments last?

The time needed for your dialysis depends on how well your kidneys work, how much fluid weight you gain between treatments and how much waste you have in your body. Usually, each haemodialysis treatment lasts about four hours and is done two to three times per week as per doctor's instructions.

## For more information, please contact:

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