


Haemodialysis



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Haemodialysis (HD) helps to remove the waste products and excess fluid that build up in your body when your kidneys stop working.

What is haemodialysis?

Haemodialysis is a treatment for kidney failure. When your kidneys don't work properly, they can't clean your blood, so toxins build up in your blood stream.

Your kidneys also make less urine so excess fluid and waste products remain in the body. Haemodialysis 'cleans' your blood by running it through a dialysis machine filter to remove toxins and excess fluid. The clean blood is then returned to your body and the dialysis fluid is thrown away.

How can haemodialysis help me?

Haemodialysis can help relieve symptoms related to kidney failure, including feeling sick, tired or weak.

It can also help with symptoms caused by having too much fluid in your body, such as puffy ankles and shortness of breath. Haemodialysis can also help to protect your bones and reduce your potassium levels.



How often will I need to have haemodialysis?

Most people have haemodialysis three times a week, with each session lasting around four hours. You may need more or less haemodialysis than this. Your healthcare team will discuss the right treatment schedule for you.

Will haemodialysis repair the damage to my kidneys?

If you have **acute kidney injury (AKI)**, the damage to your kidneys is temporary and can be repaired. You may only need dialysis for a few weeks or months until your kidneys recover and your kidney function improves.

However, if you have **chronic kidney disease (CKD)**, the damage cannot be fully repaired and your kidney function will not improve even with dialysis treatment.

Dialysis does the job of healthy kidneys by removing toxins and fluids from your body, but it will not cure your CKD. Once you start dialysis you will need to continue with it for the rest of your life, or until you receive a kidney transplant.

Where will I have haemodialysis?

You can have haemodialysis in hospital or in a separate specialist dialysis unit. You may also be able to do your own dialysis at home (**home haemodialysis**).



What needs to happen before I can start haemodialysis?

During haemodialysis your blood is taken from your body and cleaned in a dialysis machine.

For most people, access to your bloodstream is through a special connection in your arm called an **arterio-venous (AV) fistula**. This is made by a small medical procedure which joins two types of blood vessels: an **artery** (which carries blood from the heart round the body) and a **vein** (which carries blood back to the heart). This makes one large, stronger blood vessel.

If your blood vessels are very small or fragile, a piece of tubing called an **arterio-venous graft** may be used instead of a fistula.

A fistula needs to be made about six to eight weeks before dialysis starts, to allow time for it to 'mature' and get strong enough.

If you need dialysis before your fistula or graft is ready or you are unable to have one made, then you can have haemodialysis through a special dialysis line in your neck (**central venous line**). This can be used immediately.

You will also be advised to have a vaccine to protect you from hepatitis B. This is a virus which can be caught from blood. The vaccine may be given by the dialysis team or by your GP.

Will I receive any other medication?

You will usually receive a blood thinner medication during haemodialysis, to temporarily stop your blood from clotting while it is in the machine.

If you develop anaemia (a lack of red blood cells in the body), you may be given injections of iron and supplements of the hormone erythropoetin (often called EPO), to help with possible symptoms such as shortness of breath and lack of energy.

Who will help me with my treatment?

In hospital, a dialysis nurse or healthcare assistant will help you with your haemodialysis. You will also be seen regularly by a doctor who will advise on your medications and monitor your blood test results.

Some people learn to do some or all of their haemodialysis themselves, with guidance and support from nursing staff. **Shared haemodialysis care** allows you to choose which aspects of your care you would like to manage yourself, from taking your own blood pressure and weight to doing haemodialysis at home. Find more information about shared haemodialysis care on the Kidney Care UK website.

What other health professionals will be involved?

A kidney dietitian will check whether you need to make any changes to your diet, such as limiting the amount of salt, potassium or phosphate that you eat.

They will help with practical suggestions about how to adapt your diet. They will also check to see if you need any supplements to add extra vitamins and minerals to your diet. Your kidney team will check your blood test results regularly to make sure that your treatment is as effective as possible. Your dialysis schedule may be adjusted depending on these results and on your weight, blood pressure and how well you are coping with treatment.

What support is available to help manage my dialysis?

Starting haemodialysis is a big change. It will impact your everyday life and routines, including work, social life and relationships. Your kidney team are there to help you and your family. You may also find it useful to talk to a renal social worker, counsellor or patient organisation such as Kidney Care UK. They can all help you with a range of practical and emotional matters.

If I'm having regular haemodialysis, will I be able to travel?

Yes, you can still go on travel and go on holiday if you are on haemodialysis. It is important to plan your travel in advance with your dialysis team – ideally give at least three months' notice. If you are away from home, you will still need to follow your regular treatment schedule and have your haemodialysis in the local area.

For more information read the **Dialysis Away From Base (DAFB)** information on the Kidney Care UK website, or talk to your kidney team.

What are the side effects of haemodialysis?

Haemodialysis can leave you feeling tired, sick and washed out. It can also cause cramps and low blood pressure. These symptoms can be eased by reducing the amount of fluid that needs to be removed at each dialysis session. This depends on how much you drink between sessions. Your kidney team can advise you on how to measure and control your fluid intake. This is known as **fluid restriction**.

If you are receiving dialysis treatment, you may develop an infection in the bloodstream. This can be treated with antibiotics.

You may also develop problems with your fistula or dialysis line.

- Fistulas may bruise, especially when they are first used. This gets better with time. Anaesthetic (numbing) cream can help relieve any pain when the needle is inserted.
- Sometimes your fistula or dialysis line may not work very well. You will need to have extra tests and procedures to help improve their function.
- Fistulas can stop working. When you have a fistula, you will notice it has a 'buzz' which you can feel. If this disappears between dialysis sessions, call your unit immediately and they will advise you on what to do next.

How can I stay healthy on dialysis?

Keep fit

Try to exercise at least two or three times a week. Kidney disease makes your muscles weak so it is important to keep moving to keep them strong. Your kidney team may refer you to a physiotherapist who can help design the right exercise routine for you.

Stop smoking

Attend every dialysis session

It is very important that you go to all of your dialysis sessions so that the toxins are regularly removed from your blood stream.

Try to maintain a healthy weight

Give up or cut down your alcohol intake

Check your medications

Some medicines can be harmful to people with kidney disease. Tell your kidney team about any medicines that you are taking, even if they are not related to your kidney disease. This includes medicines, herbal remedies or supplements that you buy yourself from a chemist or health food shop.

Check your blood pressure regularly

Your kidney team can teach you how to do this yourself at home.

Keep to your diet and fluid allowances

Your dietitian will give you personalised advice about any fluid restrictions and any changes that you need to make to the food you eat.



Are there any alternatives to haemodialysis?

Other treatments for kidney failure include:

- **Peritoneal dialysis**, which uses the inside lining of your abdomen (the peritoneum) as the filter, rather than a machine.
- **A kidney transplant** from a donor.
- **Managing the symptoms** of kidney disease without active treatment (conservative care).

Your kidney team will discuss these choices with you and your family so you can decide which is the best option. **These choices should be discussed between you and your healthcare team so you can decide which option is best for you.**

Where can I find out more information?

- NHS Choices website – www.nhs.uk/conditions/dialysis
- Kidney Care UK: Treatments – www.kidneycareuk.org/about-kidney-health/treatments/

Contact us



In partnership with



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