Hemodialysis catheter: how do I take care of it?

azdelta

Uw ziekenhuis.

Dear patient,

Due to your greatly reduced kidney function, your renal replacement therapy has already begun or is scheduled to begin shortly.
A good access route to the bloodstream is required for dialysis. Your doctor may have a surgical connection made between an artery and a vein (an arteriovenous fistula) or have a dialysis catheter placed for this purpose. Dialysis catheters are discussed further in this leaflet. If you have any questions after reading this leaflet, please do not hesitate to contact us.

The Department of Nephrology

1. Indications

Unlike an arteriovenous fistula, a dialysis catheter can be used immediately after placement. A dialysis catheter can also be chosen as a temporary solution:

- for patients requiring urgent dialysis
- for patients who will probably have dialysis for a short period
- for patients who have no arteriovenous fistula or one that is insufficiently developed

2. Types

A distinction is made between a **temporary** and a **permanent** dialysis catheter.

Permanent dialysis catheter

This is a flexible plastic tube that can remain in place for a long time (years). The vascular surgeon usually inserts the catheter into the bloodstream via the jugular vein. The other end is guided to the chest area through a tunnel under the skin, and it is brought out there.

The tunnelled or subcutaneous route, together with a cuff around the end of the catheter, ensures anchoring and reduces the risk of infection. The end of the catheter is not visible under clothing. The procedure is performed under general anaesthesia and takes about 45 minutes.

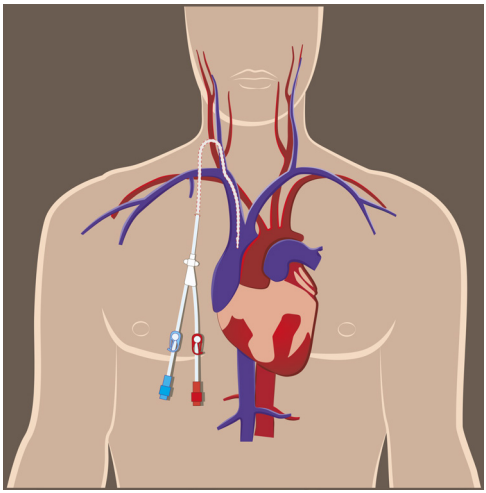

Image of a permanent dialysis catheter

Temporary dialysis catheter

A temporary dialysis catheter is made of a slightly stiffer plastic. It is placed under local anaesthesia by the kidney specialist or anaesthetist. There are three possible locations.

Jugular vein
The jugular (neck) vein is the most appropriate location. The catheter may remain in place for a few days to several weeks. There is a slightly higher risk of infection (blood infection).

Subclavian vein
A catheter in the subclavian vein (the vein under the collarbone) may also remain in place for a while, but slightly increases the risk of late narrowing of the vein and swelling of the arm.

Femoral vein
A catheter in the femoral vein (vein in the groin) is the third

option, but it is best left in place as briefly as possible due to the greater risk of infection and bleeding. With a catheter in the groin, you are only allowed to move from your bed to a seated position on a chair or toilet (and vice versa). Walking is not allowed.

3. Catheter care

When you come for dialysis, it is best to wear a blouse or shirt that can be opened sufficiently at the front so that the catheter is easily accessible: to change the dressing and for dialysis connection and disconnection.
This prevents pressure on the catheter. Otherwise, if there is pressure on the catheter, the insertion opening develops microcracks, which form a gateway for bacteria (tunnel infection).

In the first dialysis session following the placement of a permanent dialysis catheter, a special 'butterfly dressing' or 'statlock' will be applied under the dressing to allow the catheter to grow in place more quickly.



Photo of a butterfly dressing (statlock)

This butterfly dressing is intended to remain in place for six weeks. However, if it is bloody or loose, a new butterfly dressing is applied until the six weeks have passed and the catheter has grown in place sufficiently.

A nurse checks the catheter insertion site during each dialysis session. The nurse checks that the dressing is still intact and that there are no signs of infection at the catheter insertion site. If the dressing is intact and there is no sign of infection,

the catheter dressing may remain closed for up to six weeks. If the dressing is loose or scabs can be seen, the dressing is always changed. In case of infection, the catheter is applied with a special dressing that has an antiseptic effect on the insertion site. Antibiotics may be started.



Photo of a catheter dressing

Please note:

- **NEVER** change the dressing yourself. It is always checked by the dialysis nurse and changed if needed. If a home nurse or a nurse from another department wishes to change the dressing, ask that nurse to contact the dialysis clinic.
- **NEVER** let the catheter or dressing get wet: do not swim, be careful when showering or washing, etc.
- **NEVER** scratch under the dressing if the area is itchy.

- **ALWAYS** notify the dialysis clinic if the dressing is loose, damp or bloody.
- **ALWAYS** notify the dialysis clinic if you have a fever, pain or a burning sensation at the insertion site.

If your catheter falls out unexpectedly or accidentally, you should immediately:

- Lie down and have someone put pressure on the insertion site to close it for at least 15 minutes (if possible with a sterile compress or ironed handkerchief).
- Within opening hours, come to the dialysis clinic and follow the nurses' instructions. Outside opening hours, please come to AZ Delta's emergency department.

4. Showering

Due to the risk of infection, you should never swim or take a bath with a dialysis catheter. Showering is allowed if the catheter does not get wet whilst in the shower.

5. Points to consider with a dialysis catheter

A dialysis catheter is the patient's lifeline and must be handled with due care and caution.

- If the catheter is in the groin, you are only allowed to move from your bed to a seated position on a chair or toilet, and vice versa.
- Bathing is not allowed. It is possible to take a shower if the dialysis nurse puts extra protection around the catheter so that the dressing is sure to be watertight.
- If the catheter is pierced or cut through by a sharp object, the catheter must be clamped immediately and you must immediately come to the emergency department. This is life-threatening! The risk is that the patient might bleed to

death or suffocate due to air being sucked in.

- If there is any bleeding, or if the catheter dressing is completely loose, come to the emergency department so that the dressing can be changed professionally.
- It is best to wear a blouse or shirt when you come for dialysis, as this makes it easier to change the dressing and facilitates dialysis connection and disconnection.

Contact

You can call the dialysis room Monday through Saturday between 7 a.m. and 6:30 p.m. Outside these hours, please contact the hemodialysis on-call service on AZ Delta's general number: 051 23 71 11.

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MENEN DIALYSIS CLINIC
t 056 52 23 75
TIELT DIALYSIS CLINIC
t 051 42 55 77
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