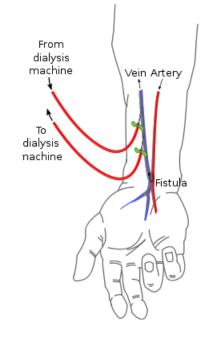
## What is dialysis?

In patients who are diagnosed with chronic renal failure, the kidney functioning is disturbed. This results in collection of excess water and waste materials in the body, leading to puffiness of face and body and other complaints. Dialysis is a process of removing waste and excess water from the blood, and provides an artificial replacement for some of the lost kidney function.

# What is AV fistula? Why should you get it done?

After a patient is diagnosed with chronic renal failure, the patient might need repeated dialysis. AV fistula is the most comfortable way of getting done a dialysis. AV Fistula's with proper care tend to last the longest for dialysis and require fewer interventions.

The surgical procedure of joining an artery and vein is known as AV fistula surgery. An AV fistula is vascular access for doing the dialysis. It is not a cure for chronic renal failure.



## What should be done before the surgery?

When a patient is diagnosed with chronic renal failure, following things must be taken care of:

- One of the arms must be preserved for creation of AV fistula, which means that no injections or pricks of any kind should be made on that particular arm.
- No blood samples must be taken from that particular arm.
- Generally most people are right handed, and so the left hand must be preserved for creation of AV fistula.
- If a catheter is placed in the neck, the arm opposite to the side of placement of the catheter must be preserved for AV fistula creation.
- Start squeeze ball/soft ball exercises with that particular hand at the earliest. It helps in increasing the size of the veins, thereby making the surgery easier.
- Before coming for the surgery, wash your entire arm with soap and water.
- The bangles, rings and other ornaments must be removed and kept at home.
- Most of the cases of AV fistula are done under local anesthesia, so it is recommended to have some breakfast before coming for the surgery.
- Before coming for the surgery, the medications for diabetes and blood pressure if any should be taken as advised by the physician.

#### Details of the surgery:

AV fistula surgery is a very complex and delicate surgery of connecting the artery and vein together by means of multiple tiny sutures. While doing the surgery, the patient has to lie on the back with one arm stretched on the side for a period of one to two hours. Please inform the doctor in case of inability of the patient to lie on the back for the said duration.

#### Possible complications of the surgery:

- Bleeding at the site of surgery.
- Failure of the AV fistula surgery (Inability to do dialysis through the AV fistula)
- Swelling over the hand, ulceration over the fingers, discoloration of the finger, etc.
- Infection at the site of surgery.

In case any of the following is encountered, please visit the nearest hospital.

#### Care to be taken after AV fistula surgery:

- Take medications advised by the doctor.
- Don't keep the hand hanging down. Keep it elevated up to the heart level. While sleeping, you can keep it elevated with the help of two-three pillows.
- Start squeeze ball exercises four to five hours after the surgery. Squeeze and leave the ball rapidly for up to ten times. This process must be repeated six to seven times a day.



- Pins used for drying clothes must be used to do exercises by opening and closing them in a similar fashion.
- The exercises must be continued for a period of three to six months after the surgery. Regular exercises help in early maturation (Healing) of the fistula which facilitates earlier dialysis through the fistula. Maturation of the fistula may take a period ranging from four weeks to three months.
- In case, the AV fistula is done near the elbow region, the elbow must be exercised by flexion and extension holding a weight/object of not more than 1 Kg. These exercises must be done 6 to 7 times a day for a period of ten minutes every time.



## Avoid the following after AV fistula surgery:

- Avoid wearing clothes, bangles, ornaments which tend to be tight on the operated arm.
- Do not lift heavy weights/objects with the operated hand.
- Do not sleep on the operated arm with your weight on the arm.
- Do not prick the operated arm or draw blood through the operated arm unless the AV fistula has matured for dialysis.

At the time of dialysis, after the inserted needles have been removed, apply gentle pressure to the needle prick area for some time.