

## AV shunt

### Consultation with the surgeon

Together with your specialist, we have chosen to place a dialysis shunt in your arm. The vascular surgeon uses a Duplex ultrasound of your arm to determine which vein and artery are most suitable for connection to each other. The vein-artery connection is made just above the wrist, in the elbow crease or under the armpit. If possible, the shunt will be placed in your non-dominant arm. It may happen that a vein-artery connection is not possible, or that a previous shunt didn't work properly. In that case, placing a PTFE shunt may be preferable. This is a subcutaneous connection between a vein and an artery using a plastic tube. These options will have been extensively discussed with you.

### Placing the shunt

#### *Before the operation*

After you have seen the surgeon, it is very important that you:

- Do not have any more injections in the arm where the shunt will be placed. This applies to blood tests, injections and infusions.
- Do not have your blood pressure taken on the arm where the shunt will be placed.
- Do not get any small cuts/wounds on the arm where the shunt will be placed. For instance, be careful when gardening.

#### *The operation*

Placing the shunt takes about an hour and a half and is done in the operating theatre. A small incision of about 4-6 cm is made, and afterwards, an artery is sutured onto a vein. After the operation, a transparent plaster is placed on the wound. You can remove this plaster after 48 hours. This often falls off on its own in the shower.

#### *After the operation*

For the first few days after surgery, your hand and forearm may be slightly swollen. If you slightly elevate your forearm on a cushion, the swelling usually goes away.

Because the pressure in the artery is higher than in the vein, the diameter of the vein will increase over the coming weeks. This is often easy to see and feel from the outside. After about 6 weeks the shunt is ready for use.

One week after the operation, you can stimulate the development of the shunt by squeezing a soft ball several times a day. However, don't do this too often. Start off by squeezing a ball 5-10 times, three times a day. This can then be extended to one and a half minutes, 5 times a day.

### **Important things to consider after surgery**

A shunt works for longer if it is spared. Here are a few recommendations for preserving the shunt:

- Don't do any heaving lifting with the arm in which the shunt is placed. For example, do not carry shopping bags using this arm.
- Don't have any blood taken from the arm with the shunt.
- Don't measure your blood pressure on the arm with the shunt.
- Don't have any infusions inserted in this arm.
- Don't wear tight clothing or jewellery.
- Don't lie/sleep on the arm with the shunt.
- Try not to bend this arm.
- Don't scratch any scabs and avoid getting any cuts.

### **Self-monitoring**

Listen to and check the shunt daily to see if you can still hear/feel it. If you notice any changes, you must contact your kidney specialist as soon as possible.

These changes may be:

- The vibration of the shunt is no longer clearly audible with the stethoscope or sounds different than usual, or you can't feel the shunt any more whereas before you were able to.
- The surgical area around the shunt feels warm, red or painful.
- If you develop a fever ( $\geq 38.5$  degrees Celsius, taking your temperature rectally is advised).
- Cold, numb and/or painful fingers.

### **Important telephone numbers**

- Diapriva  
020-301 1950  
(Monday to Friday 07:00 - 17:00)
- Niercentrum aan de Amstel  
020-810 0350  
(Monday to Saturday 07:30 - 20:30)
- VUmc Dialysis Department  
020-444 2679  
(Monday to Friday 07:30 - 20:30, Saturday 07:30 - 15:30 and Sunday from 08:30 - 16:00)

#### **Notes on this leaflet**

If any information in this leaflet is unclear or incomplete, please notify us. You can share your remarks with us via [voorlichting@zha.nl](mailto:voorlichting@zha.nl).