

## **Cerebrovascular aneurysm embolization**

You are coming for a cerebral vascular procedure. The procedure requires both preparation and aftercare and therefore a place is reserved for you in the ward as well.

### **What is an aneurysm and what is the purpose of this procedure?**

A cerebrovascular aneurysm is an arterial bulge with a risk of rupture and bleeding. Aneurysm embolization is a procedure in which an aneurysm is closed off from the blood stream.

Treatment methods are either Platinum wires (coils) inserted into the aneurysm or a metal mesh stent placed on the neck of the vascular aneurysm.

### **How to prepare for the procedure?**

- You arrive at the hospital on the morning of the procedure. Blood tests will be done.
- Whenever possible, anticoagulant medication (Marevan) should be stopped if your INR is less than 2.0. Patients with an artificial heart valve or other reasons should not stop Marevan medication. You may take other medicines as before, with as much liquids as you need to.
- Diabetes medication Metformin should not be taken on the day of the procedure. You may take other medicines as before with a small drop of water.
- You must fast from the morning of the day of the procedure.
- The use of tobacco and other nicotine products is prohibited 24 hours before the procedure, because it causes the blood vessels to constrict and may lead to failure of the procedure!
- Jewellery should be removed from around the affected area during the procedure.
- The examination is usually done through the femoral artery, therefore the skin around the groin fold area should not have redness or a rash, due to the risk of inflammation.
- The examination is performed with the help of X-rays, therefore it must be confirmed that you are not pregnant before the examination.
- Known contrast allergies and kidney impairment should also be reported in advance.

### **How is the procedure done?**

The procedure is performed by a Radiologist and two Radiographers.

During imaging, you are lying still on your back on the x-ray table.

The procedure is performed under general anaesthesia.

A thin plastic tube, or catheter, is inserted through the femoral artery into the vessel to be imaged, through which a contrast agent is injected. X-rays are taken at the same time. After the imaging, a very thin plastic tube is inserted into the vessel to be treated, through which the platinum coils or a metal mesh are inserted. The procedure is not risk free. The risks are similar to those in open surgery, i.e. cerebral haemorrhage or thrombosis, and as a result, paralysis or other neurological deficiency symptoms are possible.

## **How long does the procedure take?**

The procedure takes 2 to 4 hours. The size of the aneurysm affects the number of procedures. Repeated treatments and follow-up checks may be required.

## **What about after the procedure?**

- After the examination, the catheter is removed and the injection site is closed.
- Bed rest after the procedure is 2–7 hours. If you are unable to remain lying on your back, the nurses will help you into another position. Raising the head and lifting the legs are prohibited. Instructions for arterial puncture post-treatment can be found <https://hoito-ohjeet.fi/OhjepankkiVSSHPEnglanti/Instructions%20for%20arterial%20puncture%20post-treatment.pdf>
- After the examination, you can eat and drink normally, unless there are other restrictions.
- After embolization, the length of hospital stay is about 1 to 2 days and return to work is possible after about three days, depending on your condition and the nature of your work.
- At home, be mindful of the injection site for about 1 week. Physical exertion, saunas and hot baths should be avoided. When you go home, you will receive more detailed aftercare instructions from the ward.
- In the first instance, you should contact your local area Emergency Department:
  - if there is bleeding, swelling or a large, hard bruise at the injection site
  - if you develop a fever
  - if you get a headache or nausea
  - if your consciousness decreases or if you become confused
  - if your limb strength weakens
- For matters related to your discharge from hospital, you can contact the neurosurgery nurse's helpline at 02 3137172 on weekdays from 9 am to 10 am.

## **Where do you get the results from the procedure?**

The referring outpatient clinic or ward is responsible for communicating the results of the examination to you.