

Other options are for instance thalidomide and Anti Mek inhibitors.

Beta blockers can be suggested to reduce the AVM pulsatility and the venous outflow.

Clinical follow up is required.  
The use of compression stockings seems mandatory.

### Do's and don'ts

In general, someone with an AVM can do anything that others do.

It is not recommended to give injections or to place and IV line in arms/legs with an AVM because of the risk of thrombosis.

Avoid contact sports while traumas can trigger the AVM.

In addition to medical treatments, it's important to also pay attention to the psychological and psychosocial aspects of both the patient and the family.



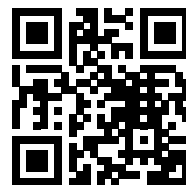
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## MORE INFORMATION: [WWW.CMTC.NL/EN](http://WWW.CMTC.NL/EN)

Email: [president@cmtc.nl](mailto:president@cmtc.nl)

Chamber of Commerce registration  
number 40508004

The CMTC-OVM organisation has for example the following certifications:



**Together  
Everyone  
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More  
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## Arteriovenous malformation (AVM)

An arteriovenous or AV malformation is a vascular abnormality in which there is an abnormal direct connection between the artery and the veins.

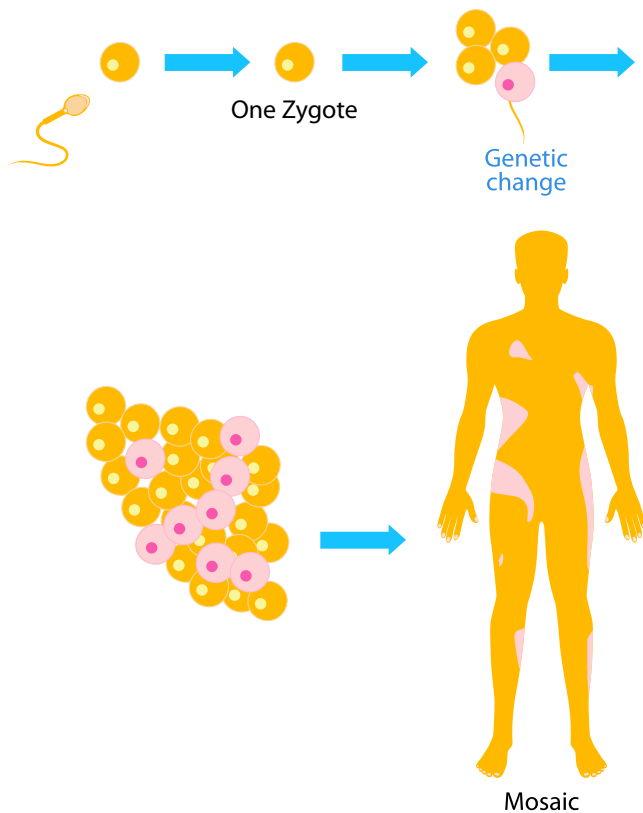
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## Detailed description

An arteriovenous malformation (AVM) is a vascular abnormality in which there is an abnormal direct connection between arteries and veins, bypassing the capillary system.

This causes fast flowing arterial blood (with high pressure) to flow into veins and they can be stretched and widened.

An AVM is a rare congenital disorder and occurs in less than 5 in 10,000 people. Certain mutations in the DNA could play a role in the development of AVMs, but it is usually not hereditary. Often an AVM is only discovered due to trauma.



## Possible complications

The symptoms differ per person. Some people have no symptoms while others have a lot. This depends on, among other things, the size, depth, and location in the body where the arteriovenous malformation is located. Complaints can also change over time. Symptoms may increase in pregnant women.

The following complaints can arise with an arteriovenous malformation:

- Pain.
- Visible swelling.
- Skin appearance issues.
- Bleeding.
- Malformation of the involved tissues.
- Functional limitations of the affected body part (e.g. hand).
- In some severe cases: internal bleeding.
- In some severe cases: heart failure due to an increased load on the heart.

The most common problems are bleeding and pain.

Sometimes arteriovenous malformations are an indication of a disease (syndrome) that also has other symptoms/problems that are not always immediately visible.

## Picture



## Possible treatments

The goal of the treatment is to reduce symptoms. Patients or parents of patients should decide together with their doctor whether treatment is desirable. The complaints experienced by the patient are particularly important in the assessment. It will have to be determined per person whether treatment is really necessary and if so, which. An AVM can be treated in different ways.

### Surgical Removal

An AVM can be removed by surgery. This is only possible when the AVM is in an area where the surgeon can remove the AVM with minimal risk of significant tissue damage.

### Endovascular treatment

Endovascular embolization is a type of surgery in which the radiologist moves a catheter through the arteries to the AVM. Then a substance is injected to close off parts of the AVM to reduce blood flow. The purpose of this is to reduce bleeding and make the abnormality smaller.

### Drug treatment

There are many developments in the field of drugs for complex congenital vascular abnormalities. The drug Sirolimus seems to have a beneficial effect and in some cases it could be used as a possible treatment (for research purposes).

