

Arteriovenous Malformation (AVM)

An AVM is a malformed tangle of blood vessels in your brain. AVMs are rare and it is not known why some people have them. AVMs most times form before birth. Sometimes AVMs are present and do not cause symptoms but can cause serious symptoms if they put pressure on the brain or burst causing bleeding.

Signs and Symptoms

- Seizures
- Headaches, can be sudden and severe
- Drooping on one side of the face
- Weakness or numbness to a body part
- Eyesight changes, blurred or double vision
- Trouble speaking or slurred speech
- Changes in the way you walk or hand movement
- Memory loss or confusion

Risks

The tangle of blood vessels is abnormal. Since these blood vessels are weaker, they can burst (rupture) causing bleeding in your brain. If your AVM bleeds, there is a chance of lasting brain damage. Severe bleeding from an AVM can lead to death. Your doctor will discuss in detail with you the location, size, and risks related to your AVM.

Tests

CT Scan – A type of X-ray that uses a computer to allow doctors to see images of your brain. This can detect if there is any bleeding in the brain.

MRI – A medical imaging machine that uses a large magnet instead of radiation to see the tissues in your brain.

Angiogram – A test where X-ray images of your brain are taken while dye is injected into a vessel in your groin. These X-rays show how the blood flows in and around the AVM.

Treatment

Your doctor will discuss with you one or more treatment options for your AVM. Many patients will have more than one treatment for their AVMs.

Observation – Your doctor may decide that it is best to watch rather than treat your AVM. You will need to keep your scheduled visits with your doctor and follow up with any tests that may be prescribed. Your doctor will discuss with you if should limit your physical activity or change your daily medicines.

Surgery – During surgery you will be asleep under anesthesia while part of your skull is opened so your doctor can remove your AVM. You will need to stay in the hospital for a few days and then rest at home after that. Once your AVM is fully removed you will no longer have any risk of bleeding from it.

Interventional Neurosurgery – This surgery is less invasive and has a shorter recovery time. A catheter (small tube) is placed in a vessel in your groin and passed to the vessel in your brain feeding the AVM. Glue, microscopic coils, and/or particles are injected into the AVM to stop blood from flowing into it and to prevent bleeding.

Radiosurgery – This surgery is also less invasive, and less recovery time is needed. Focused-beam energy sources are sent straight to the AVM to scar it and allow it to

“clot off”. It may take a few years before the AVM shrinks or goes away.

When to Call

Call your doctor right away if you have:

- Sudden loss of vision, speech, or movement.
- Sudden severe headache that is not normal for you.
- Sudden loss of consciousness or seizure.
- If you are confused or dizzy.

Resources

National Institute of Neurological Disorders and Stroke

<http://www.ninds.nih.gov>

National Organization for Rare Disorders (NORD)

<http://www.rarediseases.org>

National American Stroke Association

www.stroke.org

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 5/2023. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#6644