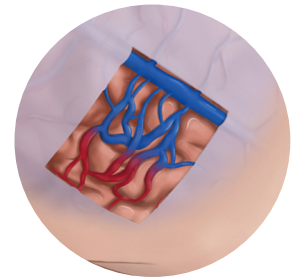


Arteriovenous Malformation (AVM)

What Is an AVM?

Arteriovenous malformations (AVMs) are malformed blood vessels that cause direct and irregular connections between arteries and veins. This results in an absence of capillaries—a network of small blood vessels that deliver oxygen to cells. In most cases, AVMs cause damage by reducing the amount of oxygen reaching brain tissue and by compressing or displacing parts of the brain. Over time, the increased blood flow through the arteries into the veins can cause some AVMs to grow progressively larger, weaken, and rupture, resulting in a hemorrhagic stroke.



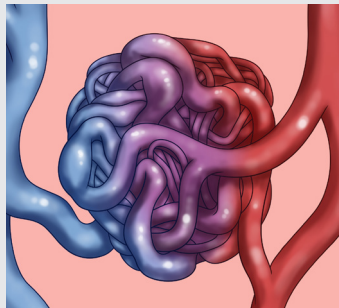
Arteriovenous Malformation

Symptoms

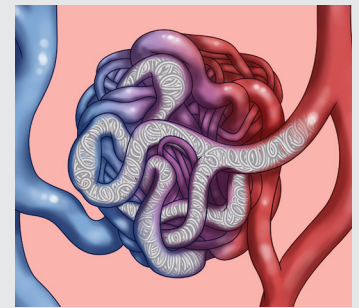
People with AVMs experience few, if any, significant symptoms. Symptoms can be present at birth or can go undetected until later in childhood. If symptoms are present, they typically include:

- Headache
- Weakness
- Seizures
- Problems with speech, vision, or movement

AVM Treatment Treatment for this condition must always be discussed with your doctor for a full discussion of options, risks, benefits, and other information. While treating AVMs, several factors come into play, and physicians must evaluate the risk posed on an individual basis.



Endovascular Embolization Endovascular embolization is a minimally invasive treatment that blocks blood flow to problem areas. To reach an AVM, a catheter (tube) is inserted through an incision in the femoral artery at the groin and threaded towards the brain. Your doctor will use fluoroscopy (a type of X-ray) to track the catheter through the arteries, up to the affected site. Once in position, a substance (such as balloons, coils or a fast-drying, glue-like material) is pushed through the tube and released into the enlarged space.



Effects of an AVM

The brain is divided into two nearly identical halves called hemispheres (left and right), with each hemisphere consisting of four lobes (frontal, temporal, parietal, and occipital). Areas within each lobe control

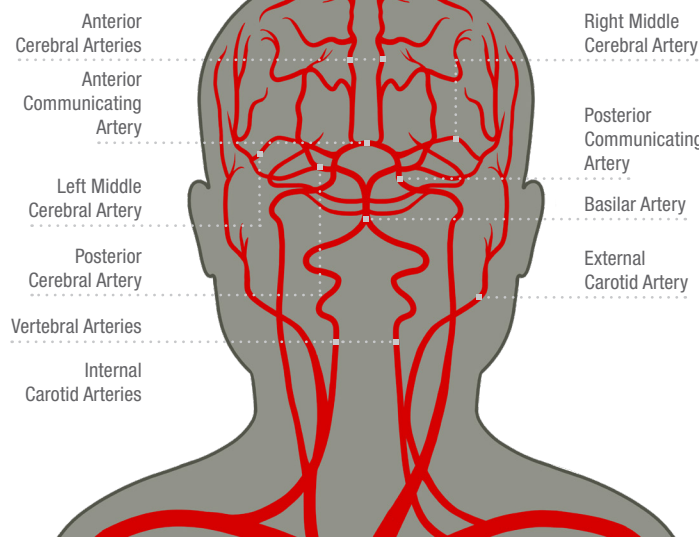
different mental and/or physical functions. Damage to the left side of the brain primarily affects the right side of the body, while damage on the right side of the brain primarily affects the left side of the body.

LEFT BRAIN FUNCTIONS

- Control of right side of the body
- Problem solving, knowledge, facts
- Numbers and letters
- Understanding words

EFFECTS OF AN AVM

- Weakness on right side of the body
- Problems seeing objects to the right
- Communication problems
- Slow, cautious behavior
- Memory loss
- Behavior changes



RIGHT BRAIN FUNCTIONS

- Control of left side of the body
- Creativity, imagination, intuition
- Shapes and symbols
- Recognizing emotions

EFFECTS OF AN AVM

- Weakness on left side of the body
- Problems seeing objects to the left
- Problems with depth perception
- Difficulty with concentration
- Impulsive behavior and poor judgment

Source: NINDS

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