

Adult Neurology

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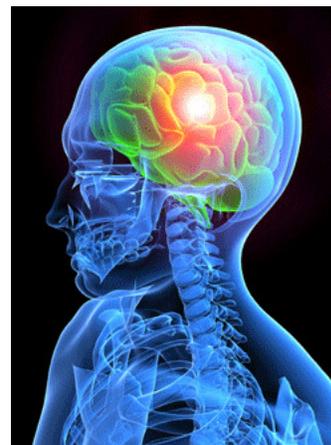
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Stroke

Strokes, or brain attacks, are a major cause of death and permanent disability. They occur when blood flow to a region of the brain is obstructed and may result in death of brain tissue. There are two main types of stroke: ischemic and hemorrhagic. **Ischemic stroke** is caused by blockage in an artery that supplies blood to the brain, resulting in a deficiency in blood flow (ischemia). **Hemorrhagic stroke** is caused by the bleeding of ruptured blood vessels (hemorrhage) in the brain.



During ischemic stroke, diminished blood flow initiates a series of events (called **ischemic cascade**) that may result in additional, delayed damage to brain cells. Early medical intervention can halt this process and reduce the risk for irreversible complications.

Evaluation of stroke symptoms often includes testing such as a CT scan, MRI scan, carotid ultrasound, transcranial Doppler, and electroencephalography (EEG). Blood tests are also helpful in identifying possible causes of stroke. Cardiac evaluation (including heart rhythm monitoring and an echocardiogram) is also generally part of the evaluation of someone with stroke symptoms.

Much of the attention after a stroke is on identifying risk factors for stroke. By lowering these risk factors, it is possible to reduce the risk of having another stroke. In addition, there are medications that have been shown to reduce this risk as well.

Incidence and Prevalence:

Stroke is the third leading cause of death and the leading cause of disability in the United States. Approximately 600,000 strokes, or brain attacks, occur in the United States each year and of these, approximately 150,000 (25%) are fatal. The incidence of stroke is higher in African Americans than Caucasians. Stroke occurs at an equal rate in men and women, but women are more likely to die. Ischemic stroke occurs more frequently in people over age 65 and hemorrhagic stroke is more common in younger people.