

Abbie Morman

Cerebrovascular Accidents

Lakeview College of Nursing

Cerebrovascular accidents, otherwise known as strokes, are the second leading cause of death and a huge contributor to disabilities worldwide. There are three types of strokes: ischemic, hemorrhagic, and transient ischemic.

A hemorrhagic stroke is one that's caused by bleeding. It occurs when a blood vessel in the brain ruptures and bleeds. This causes pressure build up and swelling as a result. An ischemic stroke is caused by a blockage of an artery. This impairs blood flow to the brain and tissues

begin to die. This one is often more common than hemorrhagic. A TIA is a temporary period of symptoms that relate to a stroke. It typically only lasts a few minutes and doesn't cause damage. This is a good warning sign that an ischemic or hemorrhagic stroke may occur in the future. Unfortunately, most people ignore these symptoms. Signs and symptoms that are most common in strokes are numbness in the face, arm, or leg, sudden confusion, trouble seeing and walking, and a severe headache. Risk factors that are associated with strokes are family history, age, sex, and prior TIA.

While there are no blood tests to diagnose a stroke, physicians will often order blood tests to learn the cause of stroke symptoms. These include a CBC, blood clotting tests, blood glucose, serum electrolytes, and C-reactive and blood protein tests. Imaging tests on the contrary, allow physicians to diagnose strokes. CT scans are used to show bleeding in the brain and damage to brain cells. It can also find other problems that may be related to the symptoms. An MRI, EKG, carotid ultrasound, and EEG can also be done to diagnose strokes. An MRI uses strong radio waves to take pictures of the brain. They often show brain changes caused by a stroke faster than a CT. It can rule out tumors or other causes that may have resulted in stroke symptoms. An EKG is used to detect if A-fib caused a stroke.

Treatment for strokes depends on if it's ischemic or hemorrhagic. To treat ischemic strokes, the main goal is to restore blood flow to the brain. IV medications, endovascular procedures, removing the clot with a stent retriever, and inserting a catheter to deliver medications straight to the brain are ways physicians treat this kind of stroke. Hemorrhagic strokes focuses on controlling the bleeding and reducing pressure build up in the brain. Some treatment options are receiving blood, surgery, endovascular embolization, and surgical clipping. There are risk factors you can control to possibly prevent strokes in the future. These include,

limiting drinking and smoking, remaining physically active, maintaining a healthy diet, and avoiding illicit drug use.

References

John Hopkins Medicine. (2022) *Types of Strokes*. Retrieved from [Types of Stroke | Johns Hopkins Medicine](#).

Kuriakose, D. Xiao, Z. (2020) *Pathophysiology and Treatment of Stroke: Present Status and Future Perspectives*. Retrieved from [Pathophysiology and Treatment of Stroke: Present Status and Future Perspectives \(nih.gov\)](#).

Mayo Clinic Staff. (2020) *Transient ischemic attack (TIA)*. Retrieved from [Transient ischemic attack \(TIA\) - Symptoms and causes - Mayo Clinic](#).

Mayo Clinic Staff. (2021) *Stroke*. Retrieved from [Stroke - Diagnosis and treatment - Mayo Clinic](#).

Office of Women's Health. (2018) *How is stroke diagnosed?* Retrieved from [How is stroke diagnosed? | Office on Women's Health \(womenshealth.gov\)](#).