

Q: “What is a stroke, and what are the symptoms and risk factors for stroke?”

Stroke is the leading cause of serious, long-term disability in the United States. Sometimes called a “brain attack,” a stroke occurs after the brain is deprived of oxygen and nutrients. Like a heart attack, this occurs after the blood flow is disrupted by a blockage, or in the case of a hemorrhagic stroke, from bleeding into the brain.

Types of stroke include:

- An ischemic stroke develops when a blood clot blocks a blood vessel in the brain. About 80 percent of strokes are ischemic, and they are the most common type in older adults.
- A hemorrhagic (or bleeding) stroke develops when an artery in the brain leaks or bursts. Hemorrhagic strokes are less common but are the most deadly.
- A transient ischemic attack (mini-stroke) happens when blood is restored to the brain and the stroke resolves. Mini-strokes are often warning signs of future strokes and provide an opportunity to decrease a patient’s stroke risk.

The type of stroke a patient has experienced drives the plan of care. When someone comes into the emergency department with stroke symptoms, the first thing we need to determine is what kind of stroke they are having. As quickly as possible, we conduct a CT scan of the brain to rule out a hemorrhagic stroke.

Knowing the symptoms of stroke and acting quickly is vital because brain damage can begin within minutes. Many people delay going to a doctor, hoping that symptoms will improve, but if we can diagnose and treat the patient quickly we have a much better chance of saving his or her life or minimizing permanent disability. **Over two million brain cells are lost every minute during a stroke, so every minute is crucial.**

Call 911 immediately if you or someone you love experience the sudden onset of any of these symptoms:

- Weakness or numbness of the face, arm or leg on one side of the body
- Sudden dimness or loss of vision
- Difficulty speaking or slurred speech
- Any sudden severe headache
- Unexplained dizziness or unsteadiness, particularly with any of the other signs

If a patient with stroke symptoms arrives at the hospital within the first few hours of the onset of symptoms, a “clot busting” drug called t-PA can be administered. Once patients are beyond that treatment window, this medication cannot be given safely. Timing is essential—getting medical attention as quickly as possible is a very important factor in a stroke patient’s outcome.

If stroke symptoms strike but go away quickly, it could mean the onset of a transient ischemic attack (TIA), also known as a mini-stroke. A TIA is a warning that a full-blown stroke can happen soon and you should seek immediate medical attention. Within seven days following a TIA, a patient’s risk of stroke can be as high as 12 percent.

Many people consider strokes to be a problem faced only by the elderly, but more than one out of four stroke victims are under the age of 65. Risk factors for men and women of any age include:

- A family history of stroke
- High blood pressure
- Smoking
- Diabetes
- Heart disease
- High cholesterol
- Atrial fibrillation
- Excessive alcohol use
- Physical inactivity/obesity

Risks that are unique to women may include taking birth control pills, being pregnant or using hormone replacement therapy.

The American Heart Association–American Stroke Association suggests the following lifestyle changes to help lower your risk for both stroke and coronary artery disease:

- If your blood pressure or cholesterol is high, talk to your doctor about how to reduce it
- Quit smoking and avoid exposure to second-hand smoke
- If you have diabetes, keep it under control with diet and prescribed medication
- Eat a diet rich in fruits, vegetables, fish and whole grains
- Be physically active – try to get 30 minutes of exercise each day
- Maintain a healthy weight
- Use alcohol only in moderation
- Consider your risk when using birth control pills, especially if you smoke or have blood-clotting problems
- Avoid hormone replacement therapy if you have gone through menopause
- Males over 50 should consider taking a baby aspirin daily

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