

Stroke (Cerebrovascular Accidents)

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Definition

A stroke is a clinical disorder that occurs when a part of the brain becomes damaged due to loss of its blood supply.

Introduction

Strokes are a common source of death or disability in the US. Strokes become apparent when a person suddenly loses functional ability. How the person is affected depends on how much, and which part of the brain loses its blood supply. The blood supply can be interrupted if the blood vessel to a specific area of the brain becomes blocked (ischemic stroke) or if the blood vessel ruptures (hemorrhagic stroke).

Common symptoms of strokes include:

- Sudden loss of the ability to walk
- Sudden loss of the use of one of their legs, arms, or hands
- Sudden loss of the ability to speak or comprehend
- Sudden loss of vision in one eye
- Sudden onset of a facial droop
- Sudden onset of the eyes not moving together

Complications of stroke:

- The person may sometimes lose consciousness
- They may sometimes complain of head pain
- They may sometimes become nauseated and vomit

Diagnosis

If an individual experiences a sudden loss of function, they should be taken to the nearest emergency department to be examined. The person may be given a CAT scan or MRI scan, of the brain, to determine if they have had a stroke. An MRI scan is the best test used to detect a recent ischemic stroke. A CAT scan is the best test to detect a recent hemorrhagic stroke. Either test may effectively be used to diagnose a stroke, if the stroke occurred 8 hours or more prior to the test.

Prevention and Treatment

The best treatment for strokes is the prevention of vascular disease. People who are at risk for developing a stroke are those people with

- high blood pressure
- sugar diabetes
- high cholesterol
- heart disease
- a family history of vascular disease
- history of smoking

For ischemic strokes:

If recognized quickly, some strokes may be treated with the use of drugs that break down the blood clots in the blood vessels. The effectiveness of these drugs is limited to how soon the person is treated. The person must be treated within 6 hours of the onset of their stroke. The outcome from this form of treatment is variable.

Management may involve admitting the person to the hospital and watching to make sure they don't have further complications related to their stroke. Aspirin or another anti-platelet medication may be given to help prevent further strokes. The person may be given tests to find out if they need some other form of treatment, such as surgery, to prevent further strokes.

For hemorrhagic strokes:

These people are more likely to complain of head pain, and lose consciousness in association with their stroke. Seizure activity is also common with this type of stroke. Treatment often involves the management of increased pressure in the head, which may make a stroke worse, or could lead to death.

These individuals are also tested to understand why their blood vessel ruptured. Sometimes a different treatment is indicated to prevent further strokes.

Rehabilitation is important, for all forms of stroke, to help the person regain some of the function they have lost.

Conclusion

Strokes are a leading cause of death and disability in the US. The damage to the brain from some strokes can sometimes be minimized if the stroke is recognized quickly, and the individual receives prompt treatment. More often, the person is left with a disability. Therefore, prevention of stroke is the best treatment. If a person is at risk for vascular disease, treatment of the disorders that place the person at risk is the best method of treatment.

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