

Stroke (Cerebrovascular Accident)

A stroke is acute death of brain tissue, and is a neurologic emergency. A stroke can cause permanent loss of function of the central nervous system (brain). If the *symptoms* (problems) of a stroke end without complications in twenty four hours, it is diagnosed as a transient ischemic attack (TIA). If this does not resolve within that time period, it is defined as a stroke.

CAUSES

A stroke is caused by a decrease of the oxygen supply to an area of your brain. It is usually the result of a small blood clot or hardening of the arteries. Blockages in, or damage to, the carotid arteries leading to the brain can also cause a stroke. Bleeding in the brain can cause, or accompany, a stroke.

SYMPTOMS

- A loss of vision, or double vision.
- Numbness or weakness on one side of the face or body.
- Inability to speak (*aphasia*).
- Confusion
- These symptoms usually develop suddenly (or may be newly present upon awakening from sleep).

DIAGNOSIS

Your caregiver can often determine the presence or absence of stroke based on your symptoms, history, and examination. A CT scan of the brain is usually performed to confirm the stroke, look for causes, and determine the severity of stroke. Other tests may be done to find the cause of the stroke. These may include:

- An EKG and heart monitoring.
- An *echocardiogram* (ultrasound evaluation of the heart).
- An ultrasound evaluation of your carotid arteries.
- Determination of blood oxygen level and blood tests.

PREVENTION

The likelihood of stroke can be decreased by appropriate treatment of high blood pressure, high cholesterol, diabetes, and by stopping smoking.

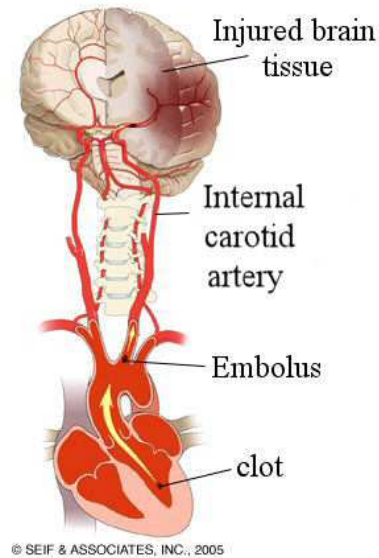
RISK FACTORS

- Hypertension.
- High cholesterol
- Diabetes
- Atrial fibrillation (an abnormal heart rhythm)
- Age over 40
- Family history of stroke or heart attack
- Personal history of blood clots.
- Smoking
- Use of illegal drugs, especially cocaine and methamphetamine.
- Oral contraceptives, especially in combination with smoking.

TREATMENT

Treatment of stroke depends on duration of symptoms, severity, and cause. **TIME IS OF THE ESSENCE!** Medications to dissolve a blood clot can only be used within three hours of the onset of symptoms. After the three hour window has passed, treatment may include rest, oxygen, intravenous fluids, and medications to thin the blood (to prevent another stroke). Medications and diet measures may be used to address diabetes, high blood pressure, and other risk factors. Physical therapy, speech therapy, and occupational therapy specialists will assess you and work to improve any functions impaired by the stroke. Measures will be taken to prevent short and long term complications, including aspiration pneumonia, blood clots in the legs, bedsores, and falls.

HOME CARE INSTRUCTIONS



Care at home after a stroke can be complicated.

- Medications – Blood thinners may be used to prevent another stroke; these need to be used exactly as instructed. Medicines may also be used to control risk factors for a stroke. Be sure you understand all your medication instructions.
- Physical, occupational, and speech therapy - Ongoing therapy is often necessary to maximize recovery after a stroke. If you have been advised to use a walker or a cane, use it at all times. Be sure you keep your therapy appointments.
- Diet – certain diets may be prescribed to address high blood pressure, high cholesterol, or diabetes. Foods may need to be of a special consistency (soft, pureed, small bites) to avoid aspirating or choking.
- Home safety – A safe home environment is important to reduce the risk of falls. Your caregiver may arrange for specialists to evaluate your home. Grab bars in the bedroom and bathroom are often important. Your caregiver may arrange for special equipment to be used at home, such as raised toilets, seat for the shower, etc.

SEEK IMMEDIATE MEDICAL CARE IF:

- You have any new stroke symptoms.
- You have fever, coughing or difficulty breathing.
- You have new chest pain, angina, or irregular heart beat.