

## **ALDERFER & TRAVIS CARDIOLOGY, PC**

*670 Lawn Ave., Suite 3A Sellersville, PA 18960*

*Tel (215)257-9500 FAX (215) 257-9500*

### **Stroke**

#### **Contents:**

- Brain Basics: Preventing Stroke
- Introduction
- What is a Stroke?
- What are Warning Signs of a Stroke?
- What are Risk Factors for a Stroke?
- What Are the Treatable Risk Factors?
- Do You Know Your Stroke Risk?

#### **Introduction**

If you're like most Americans, you plan for your future. When you take a job, you examine its benefit plan. When you buy a home, you consider its location and condition so that your investment is safe. Today, more and more Americans are protecting their most important asset--their health. Are you?

Stroke ranks as the third leading killer in the United States. A stroke can be devastating to individuals and their families, robbing them of their independence. It is the most common cause of adult disability. Each year more than 500,000 Americans have a stroke, with about 145,000 dying from stroke-related causes. Officials at the National Institute of Neurological Disorders and Stroke (NINDS) are committed to reducing that burden through biomedical research.

#### **What is a Stroke?**

A stroke, or "brain attack," occurs when blood circulation to the brain fails. Brain cells can die from decreased blood flow and the resulting lack of oxygen. There are two broad categories of stroke: those caused by a blockage of blood flow and those caused by bleeding. While not usually fatal, a blockage of a blood vessel in the brain or neck, called an ischemic stroke, is the most frequent cause of stroke and is responsible for about 80 percent of strokes. These blockages stem from three conditions: the formation of a clot within a blood vessel of the brain or neck, called thrombosis; the movement of a clot from another part of the body such as the heart to the neck or brain, called embolism; or a severe narrowing of an artery in or leading to the brain, called stenosis. Bleeding into the brain or the spaces surrounding the brain causes the second type of stroke, called hemorrhagic stroke.



Two key steps you can take will lower your risk of death or disability from stroke: know stroke's warning signs and control stroke's risk factors. Scientific research conducted by the NINDS has identified warning signs and a large number of risk factors.

### **What are Warning Signs of a Stroke?**

Warning signs are clues your body sends that your brain is not receiving enough oxygen. If you observe one or more of these signs of a stroke or "brain attack," don't wait, call a doctor or 911 right away!

- Sudden weakness or numbness of the face, arm, or leg.
- Sudden dimness or loss of vision, particularly in one eye.
- Sudden difficulty speaking or trouble understanding speech.
- Sudden severe headache with no known cause.
- Unexplained dizziness, unsteadiness or sudden falls, especially with any of the other signs.

Other danger signs that may occur include double vision, drowsiness, and nausea or vomiting. Sometimes the warning signs may last only a few moments and then disappear. These brief episodes, known as transient ischemic attacks or TIAs, are sometimes called "mini-strokes." Although brief, they identify an underlying serious condition that isn't going away without medical help. Unfortunately, since they clear up, many people ignore them. Don't. Heeding them can save your life.

### **What are Risk Factors for a Stroke?**

A risk factor is a condition or behavior that occurs more frequently in those who have, or are at greater risk of getting, a disease than in those who don't. Having a risk factor for stroke doesn't mean you'll have a stroke. On the other hand, not having a risk factor doesn't mean you'll avoid a stroke. But your risk of stroke grows as the number and severity of risk factors increases.

Stroke occurs in all age groups, in both sexes, and in all races in every country. It can even occur before birth, when the fetus is still in the womb. In African-Americans, the death rate from stroke is almost twice that of the white population. Scientists have found

more and more severe risk factors in some minority groups and continue to look for patterns of stroke in these groups.

### **What Are the Treatable Risk Factors?**

Some of the most important treatable risk factors for stroke are:

High blood pressure. Also called hypertension, this is by far the most potent risk factor for stroke. If your blood pressure is high, you and your doctor need to work out an individual strategy to bring it down to the normal range. Some ways that work: Maintain proper weight. Avoid drugs known to raise blood pressure. Cut down on salt. Eat fruits and vegetables to increase potassium in your diet. Exercise more. Your doctor may prescribe medicines that help lower blood pressure. Controlling blood pressure will also help you avoid heart disease, diabetes, and kidney failure.

Cigarette smoking. Cigarette smoking has been linked to the buildup of fatty substances in the carotid artery, the main neck artery supplying blood to the brain. Blockage of this artery is the leading cause of stroke in Americans. Also, nicotine raises blood pressure; carbon monoxide reduces the amount of oxygen your blood can carry to the brain; and cigarette smoke makes your blood thicker and more likely to clot. Your doctor can recommend programs and medications that may help you quit smoking. By quitting, at any age, you also reduce your risk of lung disease, heart disease, and a number of cancers including lung cancer.

Heart disease. Common heart disorders such as coronary artery disease, valve defects, irregular heart beat, and enlargement of one of the heart's chambers can result in blood clots that may break loose and block vessels in or leading to the brain. The most common blood vessel disease, caused by the buildup of fatty deposits in the arteries, is called atherosclerosis. Your doctor will treat your heart disease and may also prescribe medication, such as aspirin, to help prevent the formation of clots. Your doctor may recommend surgery to clean out a clogged neck artery if you match a particular risk profile. If you are over 50, NINDS scientists believe you and your doctor should make a decision about aspirin therapy. A doctor can evaluate your risk factors and help you decide if you will benefit from aspirin or other blood-thinning therapy.

Warning signs or history of stroke. If you experience a TIA, get help at once. Many communities encourage those with stroke's warning signs to dial 911 for emergency medical assistance. If you have had a stroke in the past, it's important to reduce your risk of a second stroke. Your brain helps you recover from a stroke by drawing on body systems that now do double duty. That means a second stroke can be twice as bad. Diabetes. You may think this disorder affects only the body's ability to use sugar, or glucose. But it also causes destructive changes in the blood vessels throughout the body, including the brain. Also, if blood glucose levels are high at the time of a stroke, then brain damage is usually more severe and extensive than when blood glucose is well-controlled. Treating diabetes can delay the onset of complications that increase the risk of stroke.

### **Do You Know Your Stroke Risk?**

Some of the most important risk factors for stroke can be determined during a physical

exam at your doctor's office. If you are over 55 years old, a worksheet in a pamphlet available from the NINDS can help you estimate your risk of stroke and show the benefit of risk-factor control.

The worksheet was developed from NINDS-supported work in the well-known Framingham Study. Working with your doctor, you can develop a strategy to lower your risk to average or even below average for your age.

Many risk factors for stroke can be managed, some very successfully. Although risk is never zero at any age, by starting early and controlling your risk factors you can lower your risk of death or disability from stroke. With good control, the risk of stroke in most age groups can be kept below that for accidental injury or death.

To obtain a copy of the worksheet, write or telephone requesting the pamphlet Brain Basics: Preventing Stroke from the NINDS Office of Scientific and Health Reports.

Americans have shown that stroke is preventable and treatable. A better understanding of the causes of stroke has helped Americans make lifestyle changes that have cut the stroke death rate nearly in half in the last two decades.

More than a million stroke survivors suffer little or no long-lasting disability from their strokes. Another two million, however, live with the crippling and lifelong disabilities of paralysis, loss of speech, and poor memory. Scientists at the NINDS predict that, with continued attention to reducing the risks of stroke and by using currently available therapies and developing new ones, Americans should be able to prevent 80 percent of all strokes by the end of the decade.

-----  
National Institute of Neurological Disorders and Stroke  
National Institutes of Health  
Bethesda, MD 20892  
NIH Publication No. 94-3440-b