Blood Clots and Stroke: A Patient’s Guide to Ischemic Stroke

What happened to me?
You had a stroke. The stroke you had was an ischemic (is-keem-ik) stroke, the most common type of stroke.

An ischemic stroke occurs when a blood clot blocks an artery and keeps blood from reaching the brain. An ischemic stroke often occurs after cholesterol and other material (plaques) have built up in the arteries. You may have had a stroke as a result of plaques that built up in the main arteries to your brain. Or, your stroke may be due to a blood clot which traveled to your brain from your heart. It may just be that your blood tends to clot easily.

What are the risk factors for stroke?
A risk factor is a certain condition that makes a person more likely to get a disease or have a stroke. There are two kinds of risk factors: the kind you can’t change and the kind you can.

The stroke risk factors that you can’t change or modify are:

- Age
- Race
- Heredity
- The fact that you have already had an ischemic stroke

The stroke risk factors that can be changed or modified are:

- High blood pressure
- Smoking
- Diabetes
- Blockage in the carotid artery (in the neck)
- Heavy alcohol use
- Atrial fibrillation (irregular heartbeats)
- High Cholesterol

How can I reduce my risk of stroke?
You can reduce your stroke risk in a number of ways.

You may be able to reduce your risk of stroke by making some changes in your daily life:

- If you smoke, stop.
- Enjoy some form of physical activity every day.
- If you drink, limit the number of alcoholic beverages you drink daily.

Work closely with your doctors and nurses. Even if you find it difficult at times, don’t give up. You may need to take medicine to reduce your stroke risk. For example, some stroke survivors take drugs that reduce the build-up of plaque in the arteries.

What should my blood pressure be?
What else should I be doing?
Ask your doctor what your blood pressure and cholesterol levels should be. Work together with your doctor to reach and stay at these goals. Once you have reached them, do not stop taking your medicines unless your doctor tells you to do so. If you do, your levels could become abnormal again and increase your risk for a new stroke.

For most people, a blood pressure reading of 120/80 and total cholesterol level of less than 200 mg/DL is desirable.

Several treatment goals should be regularly evaluated:

- Your “bad” cholesterol (LDL) and your blood pressure. Keep a personal and/or written record of your LDL and blood pressure levels.
- Your weight
- If you have diabetes, your hemoglobin A1c level
- If you smoke, it is very important to stop smoking and to keep track of your progress

What happens next?
Before you leave the hospital, be sure to set up appointments with your doctor. Try not to miss any, but if you do, call and make a new one right-away. Keeping your doctor appointments will help you stay on track with your treatment. It is very important that you follow up with your doctor and continue the treatments that were started while you were in the hospital.

What are the warning signs of a stroke?

- Sudden numbness or weakness of face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding speech
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headache with no known cause

What is the first thing I should do if I think I am having another stroke?
Call 911 or get to the hospital fast!
DO NOT wait for the symptoms to go away. Every minute counts.

Type of Treatment
The following treatments are used to help stroke survivors lower their risk of recurrent stroke. Ask your doctor which treatments are right for you. Then take the recommended steps to reduce your risk.

Antiplatelet Agents
Antiplatelet agents are drugs that play a role in keeping platelets in your blood from sticking together and forming clots, which helps keep blood flowing and helps reduce your risk of a stroke or heart attack.

- If you have questions about the antiplatelet agent you are taking, ask your doctor.

Anticoagulants
Anticoagulants reduce the ability of blood to clot. Doctors often prescribe these drugs for their patients with atrial fibrillation or deep vein thrombosis. Patients with atrial fibrillation, for example, can form blood clots in the heart. The clots could travel to the brain and cause a stroke.

- If you have questions about the anticoagulant you are taking, ask your doctor.

Blood Pressure Medicines
Blood pressure medicines such as ACE inhibitors and Angiotensin II receptor blockers (ARBs) are drugs that lower high blood pressure.

- If you have questions about one of these medicines, ask your doctor.
Cholesterol-lowering Medicines (Statins)
Statins are drugs that lower “bad” cholesterol and raise “good” cholesterol and thereby lower high blood pressure.
- If you have questions about a statin you are taking, ask your doctor.

Diuretics
Diuretics, or “water pills,” reduce the volume of blood in the body and thereby lower high blood pressure.
- If you have questions about a diuretic you are taking, ask your doctor.

Exercise
Exercise helps raise “good” cholesterol. It also keeps your arteries flexible, which in turn helps keep blood flowing and lowers blood pressure.
- Once your doctor says you can, try to exercise for at least 30 minutes 3 to 4 times a week. For example, walk, jog or ride a bike. Be sure to consult with your doctor before beginning any exercise program.
- Keep moving! Move as much as you can. For instance, if you park your car far away from the store, you will get a little more walking into your day. Instead of sitting and watching TV, work in the garden or clean a closet.

Diet
A healthy diet can help keep plaques from building up in your arteries.
- A low-fat, low-cholesterol diet can help you reach and stay at your ideal weight.
- Try to eat less than 200 mg of cholesterol a day. Check the nutrition labels of the food products you eat to figure out much cholesterol they contain.
- High-fiber foods, such as oatmeal, dried beans, and fruits, will help lower your cholesterol level. You can get more information on cholesterol at www.nhlbi.nih.gov/guidelines/cholesterol.

Smoking Cessation
If you smoke, STOP! Smoking causes arteries to narrow and makes the blood more likely to clot. Both of these are risk factors for stroke. It also increases blood pressure—another major risk factor for stroke.
- If you don’t stop smoking, you are 5 times more likely to have another stroke, a heart attack, or to die.
- When you quit, your risk will go down quickly!
To help you quit, you may want to ask your doctor about nicotine replacement therapy. You can also join a stop-smoking program in your community. Your family can help you by making sure that any members of your family who smoke also quit.