A transient ischemic attack or TIA is sometimes called a “mini-stroke.” TIA’s are caused by a temporary lack of blood to the brain that can result from a blocked vessel or a blood clot.

The symptoms are the same as a stroke, but the effects last only a few minutes to a few hours. Stroke symptoms usually last longer than 24 hours. Most TIAs last less than 5 minutes; the average is about 1 minute. A TIA does not leave any permanent damage, but it is a warning sign that a person is at risk for a stroke.

**Symptoms of a TIA can include:**
- Sudden numbness, tingling, and/or weakness of the face, arm, and/or leg.
- Sudden confusion or trouble talking or understanding speech.
- Sudden trouble seeing out of one or both eyes.
- Sudden trouble walking, dizziness, or loss of coordination or balance.
- Sudden severe headache with no known cause.

**Call 911** as soon as you recognize any of these symptoms. Do not wait to see if the symptoms subside. Medical treatment for TIAs and strokes needs to be given right away to decrease damage to the body.

**Diagnosis**
The cause of a TIA needs to be determined. When you arrive at the hospital, your healthcare provider will:
- Perform a physical exam.
- Obtain your past medical history.
- Ask for a list of current medications including all over-the-counter medications and herbs.
- Have you describe your symptoms in detail.

There are several tests to diagnose a TIA that may be ordered:
- CT (Computed Tomography) Scan of the brain.
- MRI (Magnetic Resonance Imaging)/MRA (Magnetic Resonance Angiography) scan of the brain.
- Carotid Duplex - Ultrasound (sound waves) of the arteries in the neck.
- Echocardiogram - Ultrasound (sound waves) of the heart.
- An EKG (heart tracing)
- TEE (Transesophageal echocardiogram)

**Treatment**
Treatment is aimed at preventing further TIAs or a stroke. The type of treatment depends upon the cause of the TIA. It can include:
- Medication.
- Surgery to clear a blocked vessel in the neck.
- Treatment for high blood pressure, high cholesterol levels, diabetes, and/or heart disease.
- Changes in diet and exercise.
- Limiting alcohol use.
- Quitting smoking or using tobacco.
Risk Factors for a TIA
Many of the risk factors for a TIA and stroke are the same as the risk factors for heart disease. These include:

**High Blood Pressure**
High blood pressure, or three readings higher than 140/90, is a major risk factor for stroke. High blood pressure can injure the lining of the blood vessel walls, which can lead to plaque build-up and/or bleeding in the vessels of the brain. Both plaque build-up and bleeding can cause stroke.

**Diabetes**
Diabetes affects all blood vessels including those that supply the brain. When blood vessels are blocked by fat that is deposited in the vessels, decreased blood flow can cause a TIA or stroke.

**High Blood Cholesterol**
Plaque is more likely to build up in the blood vessels if your total cholesterol level is greater than 200, your triglycerides are greater than 150, or your LDL is greater than 100.

**Heart Disease**
You are at risk for a TIA if you have coronary artery disease (plaque build-up in the vessels of the heart) or have had a heart attack or heart bypass surgery. The blood vessels in your brain may also have plaque build-up.

**Atrial Fibrillation**
This irregular heart rhythm increases the risk for a TIA. When the heart beats irregularly, blood pools in the heart and a clot may break off. The clot can enter the bloodstream and lodge in the blood vessels in the brain.

**Alcohol Intake**
Drinking alcohol raises blood pressure and affects blood clotting. Over time, these effects can cause a TIA or stroke.

**Illegal Drug Abuse**
Using street drugs can lead to a TIA or stroke.

**Smoking and Tobacco Use**
Smoking and using tobacco products raise blood pressure, heart rate, and cholesterol. Smoking also causes damage to the blood vessel walls making it more likely that blood clots will form.

**Physical Inactivity and Obesity**
Being inactive and/or obese puts you at risk for high blood pressure, high cholesterol, diabetes, a TIA, a stroke, and heart disease.

**Sleep Apnea**
Snoring can be a sign of sleep apnea. This means you may have times when your breathing stops while you are asleep. You may need to have sleep studies.

**Blood and Clotting Disorders**
If you have these such as sickle cell anemia, or Factor V Leiden, your chance of stroke is also increased.

**Oral Contraceptives and Hormone Replacement therapy**
A woman's stroke risk is increased is she takes oral contraceptives or hormone replacement therapy especially is she also smokes.

Since a TIA is a warning sign of a future stroke, it gives you a chance to seek treatment and make the needed changes to improve your health.

Call your doctor or nurse with questions or concerns or to assist you in making changes to improve your health.

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TIs are very important predictors of stroke.

- Do not ignore them!
- If symptoms appear, call 911, right away.

Prompt medical help could prevent severe effects of a stroke or death.