A Guide for Patients:
Cerebrovascular Disease

Your Vascular Health™

What is cerebrovascular disease?

Cerebrovascular disease can slow down blood flow and oxygen supply to the brain, and if not treated quickly, can lead to serious problems like long-term disability or even death. Cerebrovascular diseases include a range of conditions including strokes, brain aneurysms and other serious conditions.

Symptoms

Symptoms of cerebrovascular disease can be different depending on the type of problem and what part of the brain is affected. Common signs include:

- Sudden weakness or numbness, often on one side of the body
- Trouble speaking or understanding what others say
- Blurred vision or sudden loss of vision
- A very bad headache that starts suddenly
- Feeling dizzy or losing balance
- Feeling confused or having trouble coordinating movements
- Trouble walking or suddenly feeling clumsy
- Feeling sick to your stomach or throwing up
- A seizure

Talk to a Doctor

Talk to your doctor right away if you notice any symptoms of cerebrovascular disease. Getting medical help quickly is very important because cerebrovascular disease can cause serious problems like a stroke.

Causes and Risks

Several things can increase your risk of cerebrovascular disease:

- **Clogged blood vessels:** When cholesterol, fat and other substances build up inside your blood vessels, they get narrow and can block blood flow to the brain.
- **High blood pressure:** When your blood pressure stays too high for a long time, it can damage the blood vessels in your brain and raise your risk of a stroke.
- **Diabetes:** If diabetes is not controlled, it can damage blood vessels throughout your body, including the ones in your brain.
- **Smoking:** Using tobacco is a big risk factor. Smoking helps plaque (mostly cholesterol and fat) form in your blood vessels and increases the chance of blood clots.
- **High cholesterol:** Too much cholesterol in your blood can build up in your blood vessels, making them narrow and blocking blood flow to the brain.
- **Being overweight:** Carrying extra weight raises your risk of high blood pressure, diabetes and clogged blood vessels.
- **Family history:** If someone in your family has had a stroke or other blood vessel problems, you may be more likely to get cerebrovascular disease.
- **Age:** Your risk goes up as you get older. Older adults are more likely to have strokes and clogged arteries.
- **Standing or sitting for a long time without movement**
- **Unbalanced diet:** Eating lots of fatty foods, cholesterol and salt — and not enough fruits, vegetables and whole grains — can increase your risk

Recognizing Cerebrovascular Disease

Doctors use several steps to find out if you have cerebrovascular disease, which may include:

- **Medical history:** Your doctor will ask about your symptoms, risk factors, and whether anyone in your family has had cerebrovascular disease or a stroke.
- **Physical exam:** Your doctor will check your brain and nerve function, blood pressure, heart rate and listen for abnormal sounds in the neck arteries.
- **Imaging tests:**
  - **MRI and MRA:** Magnetic tests that show detailed pictures of your brain and blood vessels
  - **CT scan and CTA:** Special X-rays that look at your brain and blood vessels
  - **Doppler ultrasound:** Uses sound waves to check blood flow in the neck arteries
  - **Transcranial Doppler ultrasound (TCD):** Checks blood flow in the brain's arteries
- **Cerebral angiography:** A test where doctors inject special dye into your blood vessels and take X-ray pictures to see them clearly
- **Blood tests:** Check your cholesterol, blood sugar (for diabetes), and other things that might contribute to cerebrovascular disease
- **Electrocardiogram (ECG or EKG):** Records your heart's electrical activity to find problems that might increase stroke risk, like irregular heartbeat
- **Neurological evaluation:** Tests your thinking, movement, coordination, and senses

Role of a Vascular Surgeon

Vascular surgeons play an important role in treating cerebrovascular disease as they are the only specialists trained to recognize and treat the full spectrum of vascular diseases.

First, vascular surgeons work closely with other doctors to confirm that you have cerebrovascular disease and figure out the best treatment for you. They create a treatment plan based on your specific condition and how serious it is.

Treatment

Treating cerebrovascular disease usually involves several steps. Doctors may:

- ✔ Give you medicine
- ✔ Suggest healthy lifestyle changes
- ✔ Recommend surgery or other procedures

Vascular surgeons are trained to do several small procedures to treat cerebrovascular disease, including opening up blood vessels and removing blood clots. Sometimes, vascular surgeons need to perform more advanced procedures, such as bypass surgery, to create a new path for blood to flow around blocked arteries. All of these treatments help restore normal blood flow to the brain and prevent serious problems like stroke. Each treatment plan is made just for you. Your plan may change over time based on how well it's working.