

Stroke

What is a stroke?

Stroke is a sudden loss of function of a portion of the brain due to either blockage of blood flow or rupture of a blood vessel. The former is called pale stroke and the later called bleeding stroke.

Blood flowing to the brain carries with it oxygen and nutrition. Brain cells cannot survive without these two essential elements. They are carried by 4 blood vessels (Vessels are like tubes carrying water): two in the front and two at the back.

What are the risk factors?

Age: This is inevitable. Hence all of us as we get old we are at risk

Sex: Males are at higher risk but women get equal risk after attaining menopause.

Race: Asians have higher risk with different type of mechanisms. The blood vessels inside the brain are also narrowed in Asians when compared to westerners whose vessels outside the brain are commonly damaged.

Blood Pressure: This is a major modifiable risk factor. **Blood pressure** does not always cause symptoms. Hence checking Blood pressure after 40 years regularly is advised.

Diabetes: Control of diabetes is very important to prevent damage to both large and small blood vessels.

Cholesterol: High cholesterol is an indirect risk. Asians have problem with triglycerides and also have high cholesterol in young age which goes undetected. Remember high cholesterol does not cause any symptoms. Blood checking of “Bad Cholesterol and Triglycerides are very important

Smoking: Risk of smoking persists for 3 to 5 years after stopping smoking. Hence do not smoke.

Heart disease: This causes a different type of stroke. Here blood clot breaks away from heart and blocks the brain blood vessels.

Overweight and lack of exercise: This leads to above problems and indirectly to stroke.

What happens in Stroke?

Blood carrying tubes are blocked by blood clot either formed slowly over that tube or a clot comes from heart or other large tubes. Sometimes the tube breaks out particularly due to high uncontrolled blood pressure. This leads to lack of oxygen and glucose to the Neurons (Single unit of brain) when neurons stop working the part of the body controlled by them loses power and leads to what we call Stroke.

What are the signs of stroke?

Some times large strokes are preceded by small warning signs. Some of the warnings are as follows

- a. Sudden painless loss of eyesight in one eye as if a curtain came down. This usually recovers in hours. This is known as TIA or ministrokes.
- b. Sudden weakness of hand and leg on one side with or without speaking problem.
- c. Speech may be affected independently with or without face becoming twisted
- d. Sudden coordination problem can come as if one is drunk.

The above features may be associated with sudden headache palpitation or chest pain. Stroke can occur along with and after heart attack or with seizure.

What to do in an event like stroke?

Please do not wait. Immediately rush to the emergency. Treat this as “brain attack” New clot busting agents are available for selected patients. Also management of blood pressure and diabetes at the time of stroke will improve the outcome from stroke.

Will stroke improve to normalcy?

Most of stroke patients do improve with good medical care and physiotherapy and rehabilitation. TIA or ministrokes do improve to full extent. About 25% of stroke patients will need long term care and support measures like therapist and nurses.

How to prevent another stroke?

The important step is to control the risk factors mentioned. Control Diabetes and blood pressure adequately. Check and treat cholesterol. Take medications regularly. Specific Stroke prevention medications will be given at the time of discharge. For strokes due to irregular heart beat blood thinner called coumadin is given. It is important to take this as instructed by your doctor. This will prevent 65% stroke coming from heart.

Surgery in the form of removing a blocked artery is done to prevent further strokes. This has to be evaluated by your doctor.

Simple lifestyle modifications will help to prevent stroke

- a. Exercise 20 minutes daily for 5 days in a week. Park your car far away from shopping area and walk the rest of the distance. Mall walking, treadmills and cycles are good.**
- b. Reduce weight to standard control particularly hip circumference. Know your BODY MASS INDEX(BMI)**
- c. Avoid extra salt and sugar (Pickles, and Idli Podi)**
- d. Take plenty of vegetables and fruits**

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I will be glad to answer any questions

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