

STROKE

Stroke is a brain injury caused by a sudden interruption in the blood supply of the brain. Stroke is serious, just like a heart attack and is sometimes called a "brain attack." It occurs when part of the brain does not receive the needed blood flow for one of two reasons i.e. either the blood supply to a part of the brain is suddenly interrupted, or a blood vessel in the brain ruptures and blood invades the surrounding areas

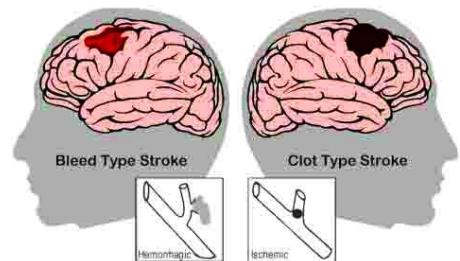
Stroke is one of the leading causes of death and disability in India. The estimated adjusted prevalence rate of stroke ranges, 84-262/100,000 in rural and 334-424/100,000 in urban areas. The incidence rate is 119-145/100,000 based on the recent population based studies

TYPES OF STROKE

There are 3 main types of Strokes:

- 1. Ischemic stroke** - Most strokes (85%) are ischemic strokes. An ischemic stroke occurs if an artery that supplies oxygen-rich blood to the brain becomes blocked. Blood clots often cause the blockages that lead to ischemic strokes.

- 2. Hemorrhagic stroke** - A hemorrhagic stroke occurs when an artery in the brain leaks blood or ruptures (breaks open). The leaked blood puts too much pressure on brain cells, which damages them



- 3. Transient Ischemic Attack (a warning or “mini-stroke”)** transient ischemic attack (TIA) is sometimes called a "mini-stroke." It is different from the major types of stroke because blood flow to the brain is blocked for only a short time—usually no more than 5 minutes



Stroke symptoms /Identification of an acute event

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

(Source:)

Use FAST to Remember the Warning Signs of a Stroke

F	FACE: Ask the person to smile. Does one side of the face droop?	
A	ARMS: Ask the person to raise both arms. Does one arm drift downward?	

S	SPEECH: Ask the person to repeat a simple phrase. Is the speech slurred or strange?	
T	TIME: If any of these signs is observed, seek medical care immediately.	

DIAGNOSING STROKE

- Medical history
- Physical & Neurological Examination
- CT Scan
- MRI Scan

AYURVEDIC MANAGEMENT

Line of Treatment

1. **Nidana parivarjana** (avoidance of aetiological factors) - Management of treatable risk factors and diseases like hypertension, acute encephalitis, heart disease etc. and avoid trauma.

Drug Therapy - All therapeutic measures may be started after crossing the acute phase of attack.

2. **Samsodhana chikitsa** - (Bio-cleansing therapies) followed by Shamana chikitsa (Palliative therapy) should be advocated.
 - **Snehana (Oleation):** massage with medicated oils such as - Mahanarayana taila, Sahachardi taila, Dhanvantara taila, Karpasasthyadi taila, Prabhanjana vimardana taila, Kshirabala taila, Mahamasha taila, Bala taila
 - **Svedana** (Medicated fomentation)
 - **Virecana** (Purgation)
 - **Basti** (medicated enema) – Matra basti with Narayana taila for 7-14 days, Niruha vasti, Anuvasana basti
 - **Nasya karma**
 - **Shiro basti**
 - **Shiro dhara**

3. **Shamana (Palliative) treatment**

Single Drugs: Ashwagandha, Brahmi svarasa, Rasona , Gandharva hastadi kvatha

Compound Formulations: Sahacaradi kvatha, Maharasnadi kvatha, Brahmi vati, Manasa mitra vataka, Balarishta, Ksheerbala taila, Dhanvantara taila

*(above said formulations are common in practice but dose should be adjusted by the Physician according to patient's condition)

PREVENTION

- Identify and review the risk factors.
- Control Blood Pressure
- Reduce the risk factors through lifestyle changes
- Eating a healthy diet
- Maintaining a healthy weight
- Getting enough exercise
- Not smoking

- Avoid alcohol
- Check Cholesterol
- Manage Heart Disease
- Recognize the signs and symptoms of a stroke (by “**FAST**” as given above) and respond immediately.

Do’s:

- *Masha* (Black Gram), *Kulattha* (Horse Gram), *Palandu* (Onion), *Rasona* (Garlic), *Shunthi / Ardraka* (Ginger), *Mulaka* (Radish), *Kushmanda* (Ash gourd), *Mudga* (Green gram) in regular diet.
- Fruits like *Dadima* (Pomegranate), *Amra* (Mango), *Draksha* (Grape), etc., can also be taken.
- Consume low fat and high fibre diet and Rasayana drugs
- Control the treatable risk factors like diabetes mellitus, hypertension, heart diseases
- Take necessary treatment of hypertension (if any)
- Control cholesterol level and weight
- Practice regular exercises

Don’ts:

- Pungent and astringent or salty food, oily/ fatty food and incompatible diet.
- Excess consumption of *chana, peas, barley* etc.
- Excessive starvation, Excess exercises, Suppressing of natural urges, awakening in the nights.
- Excessive consumption of alcohol and smoking.
- Avoid discontinuation of any regular medication without medical advise

Note:

1. Medication is to be strictly taken under the supervision of a Registered Ayurvedic Physician.
2. Visit National Institutes/CCRAS Research Centres for necessary consultation. (www.ccras.nic.in)

FREQUENTLY ASKED QUESTIONS (FAQs)

Who gets stroke?

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. Studies show the risk of stroke doubles for each decade between the ages of 55 and 85. However, a recent study found that stroke rates are on the rise for people under 55.

What is a mini-stroke or Transient Ischemic Attack (TIA)?

TIA stands for Transient Ischemic Attack. It is also known as a mini-stroke and happens when the brain's blood supply is briefly interrupted.

The symptoms are very similar to those of a full-blown stroke, but they tend to only last for a few minutes (or up to 24 hours). A TIA may cause a brief loss of vision, loss of speech, or weakness in one side of the body.

What causes Stroke?

It is often not obvious why someone should have suffered a stroke. Even though many people believe it to be a factor, stress is not a cause of stroke.

A stroke can happen to anyone. Some people are at greater risk for reasons beyond their control such as age and family history. **Other risk factors include:**

- High Blood Pressure
- Smoking
- Being Overweight
- Poor Diet
- Diabetes
- High Cholesterol
- Physical Inactivity
- Too much alcohol

What are the symptoms of stroke?

Major signs of stroke include—

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

How can you recognise the symptoms of a stroke?

A simple test can help you recognise if someone has had a stroke:

- **Face**-has their face fallen on one side? Can they smile?
- **Arms**-Can they raise both arms and keep them there?
- **Speech**-is their speech slurred?

TIME TO CALL THE AMBULANCE - IF YOU SEE ANY SINGLE ONE OF THESE SIGNS THEN RESPOND IMMEDIATELY

When stroke strikes, ACT F.A.S.T.

Why is the F.A.S.T. message so important?

The average stroke destroys roughly two million brain cells every minute. So, when someone has a stroke, it is vital they get medical treatment as quickly as possible.

How is stroke diagnosed?

Doctors have several techniques and imaging tools to help diagnose stroke quickly and accurately. The first step in diagnosis is a short neurological examination, or an evaluation of the nervous system.

Blood tests, an electrocardiogram, and a brain scan such as computed tomography (CT) or magnetic resonance imaging (MRI) will often be done.

Is stroke preventable?

Yes. Stroke is preventable. A better understanding of the causes of stroke has helped people make lifestyle changes that have cut the stroke death rate nearly in half in the last two decades.

While family history of stroke plays a role in your risk, there are many risk factors that can be controlled:

- **High blood pressure** - Managing your high blood pressure is the most important thing you can do to avoid stroke.
- **Quit smoking**
- **If you are diabetic, then learn how to manage it.** Many people do not realize they have diabetes, which is a major risk factor for heart disease and stroke.
- **If you are overweight,** start maintaining a healthy diet and exercising regularly.
- **If you have high cholesterol, then lower it** - A high level of total cholesterol in the blood is a major risk factor for heart disease, which raises risk of stroke.

What are the problems that a person might have after a stroke?

After a stroke, you might have problems doing some of the things you did before. Such as;

- Weakness or lack of movement in your leg and/or arm (paralysis)
- Trouble shooting
- Changes to the way you see things (perceptual or visual problems)
- Changes to the way you feel things e.g. touch (sensory problems)
- Problems thinking or remembering (cognitive problems)
- Trouble speaking, understanding, reading or writing
- Incontinence (Loss of control over micutration)
- Shoulder pain or arm pain/stiffness
- Feeling depressed or sad
- Problems controlling your feelings