

*Yogic Management of*  
**STROKE &  
PARALYSIS**



**Morarji Desai National Institute of Yoga**  
**Ministry of Ayush, Government of India**  
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# STROKE AND PARALYSIS

## Stroke

Stroke is a serious medical emergency which is characterised by episodes of focal brain dysfunction due to disturbance in blood supply to brain due to ischemia or heamorrhage. It is the third most common cause of death is developed world.

## Symptoms

The important symptoms of stroke can be remembered with the word

### FAST : Face-Arms-Speech-Time

- **Face** - The face may have dropped on one side and the person may not be able to smile or their mouth or eye may have drooped.
- **Arms** - The person suspected with stroke may not be able to lift one or both arms and keep them there because of arm weakness or numbness.
- **Speech** - Speech of the stroke suspected person may be slurred or garbled, or the person may not be able to talk at all despite appearing to be awake.
- **Time** - It is time to call ambulance immediately if any of these signs or symptoms are present.

It is important for everyone to be aware of these signs and symptoms. Symptoms in the FAST test identify about nine out of 10 strokes.

Other signs and symptoms may include :

- Numbness or weakness resulting in complete paralysis of one side of the body.
- Sudden loss of vision
- Dizziness
- Communication problems, difficulty talking and understanding what others are saying
- Problems with balance and coordination
- Difficulty swallowing
- Sudden and severe headache, unlike any the person has had before, especially if associated with neck stiffness
- Blacking out (in severe cases)

## Etiological classification : (Etiology-Causes)

- **Ischemic** - Ischemia is due to interruption of the blood supply. 80% of strokes are due to ischemia;
- **Hemorrhage** - Hemorrhage is due to rupture of a blood vessel or an abnormal vascular structure. 20% of strokes are due to hemorrhage.

## Clinical Classification

- **Transient ischemic attack (TIA)** - In this type of stroke symptoms resolve within 24 hours.
- **Progressive Stroke** - This describes a stroke in which the focal neurological deficit worsens after the patient first presents the problem. It may be due to increasing volume of infarction or hemorrhage.
- **Completed Stroke** - This describes a stroke in which the focal deficit persists and is not progressing.

## Risk factors

- Advanced age
- Gender
- Heredity
- Previous Vascular Event (e.g. stroke, peripheral embolism)

## Modifiable risk factors

- Hypertension (high blood pressure)
- Diabetes
- High cholesterol
- Smoking
- Excessive Alcohol Consumption
- Heart disease (atrial fibrillation, heart failure, endocarditis)

## Paralysis

Paralysis is loss of the ability to move one or more muscles. It may be associated with loss of feeling and other bodily functions. Paralysis is most often caused by damage to the nervous system or brain, especially the spinal cord. Major causes are stroke, trauma, poliomyelitis, amyotrophic lateral sclerosis (ALS), botulism, spina

bifida, multiple sclerosis and Guillain-Barré Syndrome. Temporary paralysis occurs during REM (Rapid Eye Movement) sleep and deregulation of this system can lead to episodes of waking paralysis. Drugs that interfere with nerve function, such as curare, can also cause paralysis.

### Various types of paralysis

1. **Monoplegia** is the paralysis of one limb.
2. **Hemiplegia** is a paralysis of one arm and one leg on either side of the body.
3. **Paraplegia** is impairment in motor and/or sensory function of the lower extremities. The area of the spinal canal which is affected in paraplegia is either the thoracic, lumbar or sacral regions.
4. **Quadriplegia** also known as tetraplegia, in which a person experience paralysis affecting all four limbs, although not necessarily total paralysis or loss of function.

### Causes

1. **Vascular :**
  1. Uncontrolled Hypertension
  2. Occlusion of middle cerebral and internal carotid artery through thrombosis and embolism.
2. **Infections :** Encephalitis, meningitis and tuberculosis.
3. **Space occupying lesion :** Cerebral tumor, cerebral abscess.
4. **Trauma :** Hemorrhage, Depressed fracture.
5. **Others :** Multiple sclerosis, post-epileptic paralysis, congenital sclerosis and cerebral agenesis.

### Management

The management of stroke and paralysis is aimed at minimizing irreversible damage to brain and preventing complications. Such as chest infection, painful shoulder, pressure sores, Urinary tract infection, Epileptic seizures and reducing the patients disability and reducing the risk of recurrence.

### Modern medicine Management

1. **Medicinal management :** Anticoagulant therapy in case of thrombosis and antibiotics in case of infections.

2. **Surgical treatment :** In case of hemorrhage and haematoma
3. **Other management :** Includes Physiotherapy, Acupuncture etc.

### **Dietary Management**

A poor diet is a major risk factor for a stroke. High-fat foods can lead to the build-up of fatty plaques in the arteries and being overweight can lead to high blood pressure. A low-fat, high-fibre diet is recommended, including plenty of fresh fruit and vegetables and whole grains. The amount of salt used to eat should be reduced to no more than 6g a day because too much salt will increase the blood pressure. Six grams of salt is about one teaspoon.

A balanced diet should include a small amount of unsaturated fat, which will help reduce the cholesterol levels. Avoid food containing saturated fats because these will increase the cholesterol levels. The foods high in saturated fats are :

- Butter
- Ghee – a type of butter often used in Indian cooking
- Cream
- Hard cheese
- Cakes and biscuits
- Foods that contain coconut or palm oil

### **Yogic Management**

The practices which are helpful in the management of Stroke and Paralysis are as under :

**Kriyas :** Jalneti, Sutra neti

**Sukshma Vyayama :** Ucharanashaktitathavishuddhi, Chakrashuddhikriya, Buddhitathadhrishaktivikasakakriya, Smaranshaktivikasakakriya, Medhashaktivikasakakriya, Grivashaktivikasakakriya (II), Bhujavallishaktivikasakakriya

**Sthula Vyayama :** Sarvangapushti

**Yogasanas :** Uttanapadasana, Pavanamuktasana, Vajrasana, Vakrasana/Ardhamatsyendrasana, Gomukhasana, Mandukasana, Ushtrasana, Bhujangasana, Tadasana, Urdhwahastottanasana, Katichakrasana, Shavasana.

**Pranayama :** Nadishuddhi, Sitali, Ujjayi, Bhramari.

**Bandhas :** Jalandharabandha

**Meditation :** Breath awareness, Om Meditation or guided meditation focusing on the affected part.

**Yogic diet (Mitahara) :** Alkaline foods with less oil, salt and spice.

Note : Since practicing Yogasanas will be a difficult task for a paralytic patient, assistive, modified movements will be of much help.

### Prevention of Stroke

- ❖ **Control the blood pressure :** Go for regular check up of blood pressure and, if needed, take measures to lower it. Lowering high blood pressure reduces the risk for both stroke and heart disease.
- ❖ **Stop smoking :** Cigarette smoking is linked to increased risk for a stroke. Research indicates that the risk of stroke for people who have quit smoking for 2-5 years is lower than people who still smoke.
- ❖ **Exercise regularly :** Common sense dictates that moderate exercise makes the heart stronger and improves circulation. It also helps to control weight. Being overweight increases the chance of high blood pressure, atherosclerosis, heart disease and adult-onset (type 2) diabetes. Moderate physical activities like walking, cycling, yoga, swimming and gardening work lower the risk of both stroke and heart disease.
- ❖ **Eat a healing diet :** Eat a variety of fruits and vegetables. Juicing is an excellent and delicious way to include raw foods in diet.
- ❖ **If diabetic, control the diabetes :** If left untreated, diabetes can damage the blood vessels throughout the body and lead to atherosclerosis.

**Disclaimer:** This material is meant for general awareness and not for disease management through Yoga. It should not be treated as a medical prescription. All practices should be performed under the guidance of a qualified Yoga expert.

## YOGIC PRACTICES FOR THE MANAGEMENT OF STROKE & PARALYSIS



Jalaneti



Sutraneti



Tadasana



Urdhva Hastottanasana



Katichakrasana



Vakrasana



Vajrasana



Gomukhasana



Mandukasana



Uttanapadasana



Ardha Matsyendrasana



Bhujangasana



Pawana Muktasana



Dhanurasana



Ushtrasana



Makarasana



Shavasana



Nadishodhana Pranayama



Bhramari Pranayama



Meditation

## EDUCATION AND TRAINING

Institute is presently running PG, UG, Diploma, Certificate and Foundation courses of Yoga

Sr. No.	Courses	Duration	Intake Capacity
1	M.Sc. (Yoga) Affiliated to GGSIPU, New Delhi	02 Years	30
2	B.Sc. (Yoga) (Affiliated to GGSIPU, New Delhi)	03 Years	30
3	PGDYT for Medicos and Para-medicos( Affiliated to GGSIPU, New Delhi)	01 Year	20
4	Diploma in Yoga Science for Graduates	01 Year	97
5	Certificate Course for Yoga Therapy Assistant (CCYTA)	06 Months	30
6	Certificate Course in Yoga for Wellness Instructor (2 batch in a Year)	06 Months	2/ Odq A` sbg
7	Certificate Course in Yoga for Protocol Instructor (4 batch in a Year)	03 Months	2/ Odq A` sbg
8	Foundation Course in Yoga Science for Wellness (12 batch in a Year)	01 Month	2/ Odq A` sbg
9	Basic Course in Shatkarma Practices (Weekend)	01 Month	2/ Odq A` sbg
10	Foundation Course in Yoga Science for Wellness (Weekend)	02 Months	2/ Odq A` sbg

## HEALTH PROMOTION & YOGA THERAPY PROGRAMMES

11	Health Promotion Programme (HPP)	01 Month
12	Individual Yoga Therapy Session	30-45 Minutes

## OUT PATIENT DEPARTMENT (OPD)

- Running a Yoga Therapy OPD in its premises.
- Yoga Therapy and Diet Consultation are provided to the needy people.
- Institutional Bio-chemistry Lab is attached to the OPD for assessment.
- Senior Medical Officer, Dietician, Yoga Consultant, Yoga Therapists & Yoga Instructors, Ayurveda and Naturopathy Consultants provide consultation in OPD.
- Timings of OPD - 8:00 am to 6:00 pm on all working days including Saturday.
- Mainly the NCDs are being treated in the OPD.
- Established Preventive Health Care Units in CGHS dispensaries, and Yoga Therapy Centers in Tertiary hospitals.



For further details please contact:

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For more details  
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