

# **STROKE and ITS MANAGEMENT**



**National Health Mission**  
**Deptt. of Health & Family Welfare**  
**Govt. of Odisha.**



# **STROKE - Definition**

**Abrupt onset of a neurologic deficit lasting more than 24 hrs which is attributable to a focal vascular cause**

# **Risk factors for thrombotic stroke**

- 1. Age >60 yrs**
- 2. Diabetes**
- 3. Hypertension**
- 4. Dyslipidemia**
- 5. Smoking**
- 6. Previous vascular events – Myocardial Infarction ,  
Stroke, Peripheral Vascular Diseases**

# **Risk factor for embolic stroke**

- **Atrial fibrillation**
  - **Rheumatic Heart Disease –eg mitral stenosis**
  - **Infective endocarditis**
  - **Myocardial Infarction**
  - **Dilated Cardiomyopathy**
  - **Left atrial myxoma**
  - **Prosthetic heart valve**
  - **Paradoxical embolism**
- (Patients with atrial fibrillation have an average annual risk of stroke of 5%)**

# Approach to the Patient

- **History –**
  - **DM ,HTN , heart disease**
  - **Previous TIA & stroke**
- **Physical examination**
  - pulse –rhythm , peripheral pulse**
  - **BP**
  - **CVS –to look for cardiac source of emboli**
  - **Fundoscopy – DM , HTN ,subhyloid bleed**
  - CNS- GCS assessment , weakness, cranial nerve deficit , speech disorder , cerebellar signs etc**

# INVESTIGATION

- **Haemogram**
- **Blood sugar**
- **Lipid profile**
- **ECG & ECHO**
- **Specific test depending on suspected risk factor- LP for meningitis**
- **NCCT cranium**
- **MRI**
- **Carotid Doppler**
- **Angiography –conventional**
  - CT angiography**
  - MR angiography**

# **TREATMENT**

- **Supportive measures**
- **Measures to decrease the area of Infarct – thrombolytic therapy and endovascular techniques**
- **Anti thrombotic treatment – anti platelet , anti coagulants**
- **Rehabilitation**
- **Secondary prevention**

# **Supportive Measures**

- 1. Attend to ABC**
- 2. Hyperglycemia – to control by insulin**
- 3. Fever – antipyretics**
- 4. Prevention of DVT – by pneumatic compression**
- 5. Cerebral edema – I V Mannitol**
- 6. Prevention of bed sore**
- 7. Maintenance of nutrition**
- 8. Gradual lowering of BP – only if BP >220/130 or there is LVF**



# **Rehabilitation Measures**

- **Early physical therapy**
- **Occupational therapy**
- **Speech therapy**

# **Secondary Prevention**

- **Life style modification**
- **Control of risk factors**
  - **DM**
  - **HTN - by ACE inhibitors , CCB , diuretics**
- **Statins – Atorvastatin 80 mg/day**

# **What can I do to avoid a heart attack or a stroke?**

- **Eat a healthy diet**
- **Take regular physical activity**
- **Avoid tobacco use**
- **Check and control your overall cardiovascular risk**
- **Know your blood pressure**
- **Know your blood lipids**
- **Know your blood sugar**

# THE PROGRAMME INITIATIVES

- Treatment through the Cardiac Care Units (CCU/ ICU) established in 10 DHH so far and 3 Medical Colleges & also in the AIIMS-Bhubaneswar
- **Regular follow up in the DHH NCD Clinic and by the Medical Officers in all the DHH & CHC**
- **All drugs and Diagnostics for treatment of Stroke patients in the Govt. Hospital is free to the patient**

# **FOR AFTER STROKE CARE**

- **PHYSIOTHERAPY UNITS ARE FUNCTIONING IN THE DHH LEVEL AND IN ALL THE THREE MEDICAL COLLEGES, WHERE TREATMENT IS FREE FOR THE PATIENTS**
- **FROM THIS YEAR IT IS PLANNED TO OPEN PHYSIOTHERAPY UNITS IN 17 SDH IN THE STATE FOR BENEFIT OF PATIENTS**

*Thank you*