

Review Article

The Concept of Hypertension Clinic and Hypertensionologist

A Muruganathan

There are more diabetic clinics and diabetologists in India even though Hypertension prevalence, morbidity and mortality is three times more than Diabetes. Hence the concept of Hypertension clinics and Hypertensionologists should be promoted. Objectives are to offer Medical service, Education, Patient record maintenance, Referral, Research and Follow up monitoring.

A stroke clinic similarly can take care of a specialized subset of patients with individualized care.

[*J Indian Med Assoc* 2021; **119**(12): 55-6]

Key words : Hypertension clinic, Service, Research, Followup.

The concept of Hypertension Clinic :

A small outpatient clinic which focuses on hypertension screening, prevention and management

- This clinic should run by a physician with 10 years of experiences in hypertension management (hypertension specialist-Hypertensionologist)
- This clinic should provide a good validated BP monitor and practice accurate BP measurement
- Should have three different types of cuff sizes for measuring BP for obese people
- Home BP Monitor needs to be popularized needs to be focused largely to optimize the management of hypertension patients.
- It should have ambulatory blood pressure monitors facilities
- This clinic should have trained nurses, diet and exercise counselors
- Should have ECG machine
- Should have lab facilities to do basic tests
- Should have a Fundoscope
- Echo – optional
- Practice simplified protocols for management
- Proper data maintenance (ER)
- The experienced physicians with proper clinical examination and history would get a clue for diagnosing secondary hypertension.
- This hypertension clinic can be linked to a hypertension specialty center for necessary referral.

Rationale for smaller Hypertension clinics across India :

- To significantly improve hypertension screening

and treatment to reduce the burden of complications due to hypertension.

- There is an emerging need to strengthen healthcare at primary, secondary and tertiary levels, integrating prevention, diagnosis, and appropriate treatment for hypertension management.

Best Practices education :

Accurate blood pressure measurement :

- The team with qualified expert physicians and nurses should ensure the accurate reliable measurement of BP as per the guidelines with the help of validated BP monitors.
- HBPM and ABPM to be promoted.
- ABPM, HBPM and clinic BP devices should be validated by an independent professional body using established protocols.

Hypertension Speciality Centre :

- Hypertension centre is a specialized tertiary care centre with necessary modern equipments, an upgraded sophisticated version of Hypertension clinic.
- Consisting of a team of specialists,
- Hypertension centre consists of a team enriched with specialists, like cardiologist, nephrologist, neurologist, endocrinologist, experienced healthcare workers, known for their high-quality work in research and clinical management with special interest in management of all forms of hypertension and its complications, with highly integrated, comprehensive and collaborative team working together with a strong patient centric approach.
- With a well-equipped facility in place, the highly skilled members must be able to demonstrate extreme capability to diagnose secondary hypertension.
- 24 hours' hypertension emergencies services on a need basis for patients
- Can assess the indices of organ damage, the total cardio vascular risk using Echo, Fundoscopy,

¹MD, FICP, FRCP (Glasg & London), FRCP Ireland (Hon), Master of ACP (USA), FPCP (Philippines), Imm. Past Governor American College of Physicians India Chapter, Chairman, Shristi A G Hospital, Tirupur 641601, Tamilnadu and Corresponding Author

Received on : 01/12/2021

Accepted on : 07/12/2021

CMT, Ankle brachial index (ABI) and Pulse Wave Velocity (PWV).

- Possess a state-of-the-art modern lab to diagnose secondary hypertension and complications.
- Should possess Cath lab, CT scan and other necessary infrastructure to diagnose and tackle any complications

Objectives of the hypertensive specialty Centre :

(1) Medical service : Clinical care, investigation, treatment, ongoing monitoring, and auditing of therapeutic response using ABPM/HBPM (Ambulatory Blood Pressure Monitoring/ Home Blood Pressure Monitoring).

(2) Education :

- To provide structured training for junior physicians
 - Conduct webinars and seminars to update the nearby physicians
 - Training healthcare workers
 - Patients' education aiming to empower the patients to improve adherence to treatment and prevent complications through online and live demonstrations. Handbills in regional language describing hypertension to be provided to all the patients.
 - Training about HBPM and ABPM.

(3) Lifestyle modification and other risk factors: Non-pharmacological management including diet, exercise, yoga, meditation and weight reduction should be done by the proper educational counselor. Multi-disciplinary team may need to be involved to achieve the desired result regarding the lifestyle modification and treating the risk factors.

(4) Patient record maintenance : Hypertension registry to be maintained

- Data base management system with the help of computer software must be established. This can be designed to systematically collect, store and retrieve patient's data.

(5) Referral center : It should have specialists to treat patients who are referred with difficult to treat Hypertension, secondary Hypertension, and hypertension with complications referred by primary care physicians.

(6) Research : Facilities to do epidemiological and clinical trials in collaboration with other hypertension specialty centres with the support of regulatory bodies.

(7) Adopt a village

(8) Use telemedicine

(9) Periodical screening camps

Follow up monitoring : Follow-up monitoring is very important as HT management is a lifelong process. The follow-up management can be done through mobile

phone, WhatsApp, internet, auditing reviewing individual cases.

Another important concept is that of a stroke unit because hypertension is directly responsible for 57% of all stroke deaths. Hypertension and stroke are intimately related .

What is a Stroke Unit ?

- A stroke unit can be defined as: "an area within a hospital where stroke patients are managed by a co-ordinated multidisciplinary team specializing in stroke management

Why are Stroke Units effective ?

- Geographical concentration of stroke care expertise
 - Team approach
 - Focused attention on stroke care specifics:
 - Factors that worsen outcome
 - Prevention, early detection & treatment of complications
 - Early implementation of secondary prevention strategies
 - Early rehabilitation
 - Motivation of "Team" motivates patients/families

Who will run the Stroke Unit ?

- A stroke specialist (Neurologist or Internist with specialized training)
- Team comprising trained nurses, physiotherapists, occupational therapists
- Stroke unit with a comprehensive stroke programme
 - Neurologist, Physician, Geriatrician, Rehabilitation Physician

How to organise a stroke unit in resource limited settings ?

Facility to do CT Scan (to diagnose thrombosis and to rule out hemorrhage)

Intensive care with all necessary equipments (gadgest) and trained persons

Ward :

- Geographically defined area
- Beds 4
- Monitors
- Infusion pumps

Staffing :

- Nurses
- **Doctors:** Physicians, Neurologists, Neurosurgeons and a Radiologist
 - **Rehabilitation :** Physiotherapist, Occupational therapist and Speech therapist
 - Social worker