







GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI DIRECTORATE GENERAL OF HEALTH SERVICES, F-17, KARKARDOOMA, DELHI-110032 NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES, npcdcsdelhi@gmail.com

# Hypertension Treatment Protocol

Measure blood pressure of all adults over 30 years

## High BP : SBP ≥ 140 or DBP ≥ 90 mmHg

Check for compliance at each visit before titration of dose or addition of drugs

Step 1

If BP is High:\*

**Prescribe Amlodipine 5mg** 

Step 2

After 30 days measure BP again. If Still high:

**Add Telmisartan 40mg** 

Step

After 30 days measure BP again. If Still high:

**Increase Telmisartan to 80mg** 

Step

After 30 days measure BP again. If Still high:

**Increase Amlodipine to 10mg** 

Step 5 After 30 days measure BP again. If Still high:

Add Chlorthalidone 12.5mg\*\*



After 30 days measure BP again. If Still high:

Increase Chlorthalidone to 25mg\*\*



After 30 days measure BP again. If Still high:

Check If the patient has been taking medication regularly and correctly. If yes, refer to a Specialist.

- \* If SBP  $\geq$  180 or DBP  $\geq$  110 refer patient to a Specialist after starting treatment .
- If SBP 160-179 or DBP 100-109, Start treatment on the same day. If SBP 140-159 or DBP 90-99, Check on a different day and if still elevated, start treatment.
- \*\*Hydrochlorothiazide can be used if Chlorthalidone is not available (25 mg starting dose,50mg intensification dose).

Pregnant women and women who may become pregnant

- ▲ **Do Not** give Telmisartan or Chlorthalidone. Statins, ACE inhibitors, angiotensin receptor blockers (ARBs), and thiazide/thiazide-like diuretics should not be given to pregnant women or to women of child bearing age not on effective contraception.
- Calcium channel blocker (CCB) can be used. If not controlled with intensification dose, refer to a specialist.

## **Diabetic patients**

- Treat diabetes according to protocol.
- Aim for a BP target of < 140/90mmHg.

#### **Heart attack in last 3 years**

• Add beta blocker to Amlodipine with initial treatment.

#### Heart attack or stroke, ever

• Begin low- dose aspirin (75mg) and Statin.

#### People with high CVD risk

• Consider aspirin and Statin

#### **Chronic Kidney disease**

• ACEI or ARB preferred if close clinical and biochemical monitoring is possible.

# Lifestyle advice for all patients



Avoid tobacco

Exercise

Reduces salt,



fried foods

and alcohol 2.5hr/week under 1tsp/day

• Eat 5 Servings of fruits and vegetables per day.

- Avoid papads, Chips, Chutneys, dips and pickles.
- Use healthy Oils: e.g. Sunflower, mustard or groundnut.
- Limit consumption of foods containing high amounts of saturated fats.
- Avoid processed foods containing trans fats.
- Avoid Added Sugar.
- Reduce Weight if overweight.
- Reduce fat intake by changing how you cook:
  - Remove the fatty part of meat.
  - Use vegetable oil.
  - Boil, Steam or bake instead of fry.
  - Limit reuse of oil for frying.

w.e.f . January 2024 (Source: ICMR IHCI Project)