# Karnataka

# Hypertension 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



If BP is high:\*

**Prescribe Amlodipine 5mg** 



After 30 days measure BP again. If still high:

**Increase to Amlodipine 10mg** 

Step 3

After 30 days measure BP again. If still high:

**Add Telmisartan 40mg** 

Step 4

After 30 days measure BP again. If still high:

**Increase to Telmisartan 80mg** 

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 to Chlorthalidone 25mg\*\*** 



After 30 days measure BP again. If still high:

Check if the patient has been taking medications regularly and correctly. If yes, refer to a specialist.

# 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 childbearing 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 < 140/90 mmHg.</li>

#### **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.
- \* 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 (25mg starting dose, 50mg intensification dose). Recommended investigations at initiation of therapy: Haemoglobin, blood sugar, urine.

# Lifestyle advice for all patients



Avoid tobacco

and alcohol



Exercise

2.5 hours/week



Reduce weight,

if overweight



Reduce salt,

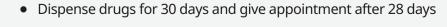
under 1 tsp/day



Eat less fried foods

- Eat 5 servings of fruits and vegetables per day.
- Avoid papads, chips, chutneys, dips, pickles etc.
- Use healthy oils like sunflower, mustard, or groundnut.
- Limit consumption of foods containing high amounts of saturated fats.
- 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 fryLimit reuse of oil for frying
- Avoid processed foods containing trans fats.
- Avoid added sugar.





Medications should be taken at the same time each day