## Maharashtra

# Hypertension Protocol



Measure blood pressure of **all adults** over 18 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 5 mg +** adherence counseling

#### Women who are or could become pregnant

- ▲ DO NOT give Telmisartan or Chlorthalidone.
- ACE inhibitors, angiotensin receptor blockers (ARBs), thiazide/thiazide like diuretics and statins should not be given to pregnant women or to women of childbearing age not on highly effective contraception.



## After 30 days measure BP again. If still high: Add Telmisartan<sup>\*\*</sup> 40mg



After 30 days measure BP again. If still high: **Increase Telmisartan to 80mg** 



After 30 days measure BP again. If still high: **Increase Amlodipine to 10mg** 



After 30 days measure BP again. If still high: Add Chlorthalidone 6.25mg



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After 30 days measure BP again. If still high: **Increase Chlorthalidone to 12.5mg** 

## After 30 days measure BP again. If still high:

Check that patient has been taking drugs regularly

• Calcium channel blocker (CCB) can be used. If not controlled with intensification dose, refer to specialist.

#### **Diabetic patients**

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

#### Heart attack in last 3 years

• Add beta blocker to Amlodipine at initial treatment.

#### Heart attack or stroke ever

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

#### **Chronic kidney disease**

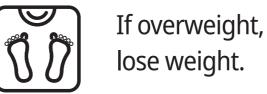
- ACE inhibitor or ARB preferred if close clinical and biochemical monitoring possible after specialist opinion.
- If SBP 140-159 and/or DBP 90-99, start on lifestyle \* management for one month prior to initiation of medications.
  - **If SBP** ≥180 and/or DBP ≥110 start treatment and refer to specialist immediately.
  - **Recommended investigations at initiation of therapy:** CBC, blood sugar, serum creatinine, electrolytes (optional). If S creatinine >1.5 mg, refer to specialist.
- If Telmisartan not available: replace with Enalapril 5 mg (initiation dose) and 10 mg (intensification dose).

### and correctly. If so, refer patient to a specialist.

#### Lifestyle advice for all patients



Eat less than 1 tsp of salt per day: avoid papads, chips, chutneys, dips, pickles, etc.





Exercise regularly: 2.5 hours per week





- Limit intake of fried foods.
- Avoid foods with high amounts of saturated fats (e.g. cheese, ice cream, fatty meat).
- Avoid processed foods containing trans fats.
- Avoid added sugar.
- Eat 5 servings of fruits and vegetables per day.
  - Use healthy oils: polyunsaturated and monounsaturated oils.
  - Reduce fat intake by changing how you cook: remove the fatty part of meat; use vegetable oil; boil, steam or bake rather than fry; limit reuse of oil for frying.

**India Hypertension Management Initiative:** Maharashtra 1.00-9-18



