

# Hypertension Protocol



Measure blood pressure of **all adults** over 30 years

High BP: **SBP  $\geq$  140** or **DBP  $\geq$  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:

**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\*\***
- Step 6** 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.

**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 fry
  - Limit reuse of oil for frying
- Avoid processed foods containing trans fats.
- Avoid added sugar.