

# 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:<sup>\*</sup>  
**Prescribe Amlodipine 5mg**
- Step 2** After 30 days measure BP again. If still high:  
**Add Telmisartan 40mg**
- Step 3** After 30 days measure BP again. If still high:  
**Increase Amlodipine to 10mg**
- Step 4** After 30 days measure BP again. If still high:  
**Increase Telmisartan to 80mg<sup>#</sup>**
- Step 5** After 30 days measure BP again. If still high:  
**Add Chlorthalidone 12.5mg<sup>\*\*</sup>**
- Step 6** After 30 days measure BP again. If still high:  
**Increase Chlorthalidone to 25mg<sup>\*\*</sup>**
- ... 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.  
 Recommended investigations at initiation of therapy: Haemoglobin, blood sugar, urine analysis for proteinuria, serum creatinine.  
 \*\* Hydrochlorothiazide can be used if Chlorthalidone is not available (25mg starting dose, 50mg intensification dose)  
 # Ensure serum creatinine result before increasing Telmisartan to 80mg

**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, safflower, groundnut, etc
- Limit consumption of foods containing high amounts of saturated fats (cheese, ice-cream, fatty meat).
- 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 excess sugar, carbonated/package drinks.