



# 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 Hydrochlorothiazide 12.5mg**
- Step 6** After 30 days measure BP again. If still high:  
**Increase to Hydrochlorothiazide 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.

### 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.

## 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/packaged drinks.