

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.
Recommended investigations at initiation of therapy: Haemoglobin, blood sugar, urine analysis for proteinuria, serum creatinine.

- ** Hydrochlorothiazide can be used if Chlorthalidone is not available (25 mg starting dose, 50 mg intensification dose).

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.