

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 Amlodipine to 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 Telmisartan to 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 Chlorthalidone to 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 (25mg starting dose, 50mg 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, 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.