

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 6.25mg**
- Step 6** After 30 days measure BP again. If still high:

Increase to Chlorthalidone 12.5mg**
- ⋮

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

Referral criteria for patients

- Cardiovascular disease, chronic kidney disease, and difficult-to-control diabetes
- Suspected secondary hypertension
- Adverse events with protocol medications
- Women who are pregnant

* 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 not available (12.5mg starting dose, 25mg 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.