

# 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:\*  
**Start on lifestyle modifications.**  
**Review after 2 weeks.**

**Step 2** If BP is high at 2 weeks review:  
**Start Amlodipine 5mg/any Calcium channel blocker (CCB)**

**Step 3** Review in 1 month. If BP is high:  
**Add Telmisartan 40mg (ARB)**  
Along with Amlodipine 5mg

**Step 4** Review in 1 month. If BP is high:  
**Intensify Telmisartan to 80mg**  
Along with Amlodipine 5mg

**Step 5** Review in 1 month. If BP is high:  
**Intensify Amlodipine to 10mg**  
Along with Telmisartan 80mg

**Step 6** Review in 1 month. If BP is high:  
**Add Chlorthalidone 12.5mg**  
Along with Amlodipine 10mg and Telmisartan 80mg



Review in 1 month. If BP is high:  
Confirm **compliance** to treatment. If confirmed, **refer** to 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 and/or DBP  $\geq$  110  
Refer immediately to higher centre after starting treatment.

If SBP  $\geq$  160-179 and/or DBP  $\geq$  100-109  
- Do basic investigations: ECG, S, creatinine, Urine protein, RBS  
- Start on lifestyle modifications  
- Start drug treatment the same day

If SBP  $\geq$  140-159 and/or DBP  $\geq$  90-99  
Start on lifestyle modifications for 2 weeks prior to initiation of medication

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/package drinks.