Hypertension Protocol

Measure blood pressure of all adults over 18 years

High BP: SBP ≥ 140 or DBP ≥ 90 mmHg

Check for compliance at each visit before titration of dose or addition of drugs

Step 1
If BP is high*
Prescribe Amlodipine 5 mg and lifestyle management

Step 2
After 30 days # measure BP again. If still high:
Add Telmisartan 40mg

Step 3
After 30 days measure BP again. If still high:
Increase Telmisartan to 80mg

Step 4
After 30 days measure BP again. If still high:
Increase Amlodipine to 10mg

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 Chlorthalidone to 12.5mg

Women who are or could become pregnant

▶ DO NOT give Telmisartan or Chlorthalidone.
- ACE inhibitors, angiotensin receptor blockers (ARBs), thiazide/thiazide-like diuretics and statins should not be given to pregnant women or to women of childbearing age not on highly effective contraception.
- Calcium channel blocker (CCB) or labetalol can be used in consultation with specialist.

Diabetic patients

- Treat diabetes according to protocol.
- Aim for BP target of <140/90.

Heart attack in last 3 years

- Add beta blocker to Amlodipine at initial treatment.

Heart attack or stroke ever

- Begin low-dose aspirin (75 mg) and statin.

Chronic kidney disease

- ACE inhibitor or ARB preferred if close clinical and biochemical monitoring possible after specialist opinion.

Diabetic Nephropathy patients

- Start treatment if SBP ≥ 130 and/or DBP ≥ 80.
- Aim for BP target of <130/80.

* If SBP ≥ 180 or DBP ≥ 110, refer patient to a specialist after starting treatment. If SBP 160-179 or DBP 100-109, recheck BP >30 mins. Start treatment on same day. If SBP 140-159 or DBP 90-99, recheck on next day and if still elevated, start treatment.

# If SBPs ≥ 160 and/or DBP ≥ 100, ask to revisit in 15 days.

Recommended investigations at initiation of therapy: Haemoglobin, CBC, blood urea, creatinine, HbA1C, lipid profile, ECG, urine routine.

Optional investigations: Liver function tests (if patient obese BMI ≥25), PVV (if HbU >16g/dl or if advised by medical officer), electrolytes (before starting 2nd dose of Telmisartan &/or patient age ≥60), ultrasound (t/o renal and kidney involvement), fundus examination.

Refer to specialist if young patient (<25 years); pregnancy; family history of renal disease; BP not controlled even after step 6; Hypertensive emergency SBP ≥ 200 &/or DBP ≥ 110; any complications detected.

Lifestyle advice for all patients

- Eat less than 1 tsp of salt per day: avoid papads, chips, chutneys, dips, pickles, etc.
- Exercise regularly: 2.5 hours per week
- If overweight, lose weight.
- Avoid alcohol and tobacco
- Limit intake of fried foods.
- Avoid foods with high amounts of saturated fats (e.g. cheese, ice cream, fatty meat).
- Avoid processed foods containing trans fats.
- Avoid added sugar.
- Adequate sleep for 6 to 8 hrs.
- Eat 5 servings of fruits and vegetables per day.
- Use healthy oils, e.g. sunflower, mustard or groundnut.
- Reduce fat intake by changing how you cook: remove the fatty part of meat; use vegetable oil; boil, steam or bake rather than fry; limit reuse of oil for frying.

Dispense drugs for 30 days and give appointment after 4 weeks
Medications should be taken at the same time each day