# **Punjab**

# **Hypertension Protocol**

Measure blood pressure of **all adults** over 18 years



High BP:  $SBP \ge 140$  or  $DBP \ge 90$  mmHq



If BP is high:\*

# **Prescribe Amlodipine 5mg**



After 30 days# measure BP again. If still high:

# **Increase to Amlodipine 10mg**

After 30 days# measure BP again. If still high:

# **Add Telmisartan 40mg**

After 30 days# measure BP again. If still high:

# **Increase to Telmisartan 80mg**

After 30 days# measure BP again. If still high:

# Add Chlorthalidone 12.5mg\*\*



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.

- \* If SBP ≥ 180 or DBP ≥ 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.
- Dose of anti-hypertension medications can be titrated at 15 days frequency if required.
- Hydrochlorothiazide can be used if Chlorthalidone is not available (25 mg starting dose, 50 mg intensification dose).

#### 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 mmHq.

#### 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.

# Lifestyle advice for all patients









Avoid tobacco and alcohol

Reduce salt, 2.5 hr/week under 1 tsp/day

fried foods

Eat 5 servings of fruits and vegetables per day.

Avoid papads, chips, chutneys, dips, and pickles.

Use healthy oils:

E.g. 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.