Andhra Pradesh

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 Hydrochlorothiazide 12.5mg

**Step 6**

After 30 days measure BP again. If still high:

Increase to Hydrochlorothiazide 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.

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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.

Chronic kidney disease

- ACEI or ARB preferred if close clinical and biochemical monitoring is possible.

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* If BP \(\geq 180\) 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.

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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/packaged drinks.

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