Rajasthan

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

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
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| 1 | **If BP is high:**
|   | *Prescribe Amlodipine 5mg* |
| 2 | After 30 days measure BP again. If still high:
|   | **Add Telmisartan 40mg** |
| 3 | After 30 days measure BP again. If still high:
|   | **Increase Telmisartan to 80mg** |
| 4 | After 30 days measure BP again. If still high:
|   | **Increase Amlodipine to 10mg** |
| 5 | After 30 days measure BP again. If still high:
|   | **Add Chlorthalidone 12.5mg** |
| 6 | After 30 days measure BP again. If still high:
|   | **Increase Chlorthalidone to 25mg** |
|   | ... |

Check if the patient has been taking medications regularly and correctly. If yes, refer to a specialist.

**Women who are or could 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 ≥ 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

** Double**

- Hydrochlorothiazide can be used if Chlorthalidone is not available (25mg starting dose, 50mg intensification dose).

**Lifestyle advice for all patients**

- Avoid tobacco and alcohol
- Exercise 2.5 hr/week
- Reduce salt, under 1 tsp/day
- Eat less fried foods
- Eat 5 servings of fruits and vegetables per day
- Avoid papads, chips, chutneys, dips, and pickles
- Use healthy oils: 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

* Medications should be taken at the same time each day
* Dispense drugs for 30 days and give appointment after 28 days