

Government of Kerala

Hypertension Protocol

Screen all adults over 18 years.

High BP: **SBP** > **140** or **DBP** > **90** mmHg



If BP is high

Check S. Creatinine and Urine Protein

Start on lifestyle modifications for 3 months. Review every month.

If BP is high at monthly review, start on drug treatment



Review in 3 months. If BP is high

Start Amlodipine 5mg (CCB)



Review in 1 month. If BP is high

Add Telmisartan 40mg (ARB)

Along with Amlodipine 5mg



Review in 1 month. If BP is high

Intensify Telmisartan to 80mg

Along with Amlodipine 5mg



Review in 1 month. If BP is high

Intensify Amlodipine to 10mg

Along with Telmisartan 80mg



Review in 1 month. If BP is high

Add Chlorthalidone 12.5mg (diuretic)

Along with Amlodipine 10mg and Telmisartan 80mg



Review in 1 month. If BP is high

Confirm **compliance** to treatment. If confirmed, **refer** to specialist.

Blood pressure measurements

At least 2 readings at an interval of 2 minutes. If readings differ by more than 5mm Hg, take a third reading. The lower of the readings should be taken as the representative SBP and DBP.

If SBP \geq 180 and/or DBP \geq 110

Refer immediately to higher centre after starting treatment.

If SBP ≥ 160-179 and/or DBP ≥ 100-109

- Do basic investigations: ECG, S. creatinine.
- Start on lifestyle modifications.
- Start drug treatment.

If SBP \geq 140-159 and/or DBP \geq 90-99

Start on lifestyle modifications.

Measuring blood pressure

- Use a mercury sphygmomanometer or electronic digital oscillometric device that is validated using a standard protocol and calibrated regularly.
- Patient should relax for 5 minutes before measurement.
- Patient should not have had caffeine in the past hour or smoked in the past 30 minutes.
- Patient should be seated comfortably with back supported, arm at heart level, and legs uncrossed.
- Appropriate cuff size: length of bladder 80% of arm circumference, width 40% of arm circumference.

Lifestyle modification

All patients require lifetime lifestyle modification.



Change diet

Salt restricted (<5g/day), low-fat diet.



Regular exercise

Moderate intensity, 30 minutes, 5 days a week



Reduce weight

Target BMI 18.5 - 22.9 kg/m²



Alcohol and Smoking

Avoid unhealthy intake of alcohol. Stop smoking.





