

## Hypertension Treatment Protocols for Non-Pregnant Adults

Hypertension is defined as blood pressure consistently greater than 140/90 on more than two occasions.

Check random blood glucose on all hypertensive patients and follow diabetes protocols if elevated.

Check urine dipstick for blood & protein (end-organ kidney disease).

Counsel on life-style modifications and importance of medication adherence at every visit.

**STOP SMOKING! REDUCE SALT!**

**BP 140-159/ 90-99: Stage 1 hypertension**

If no CVD and low CVD risk - advise lifestyle changes and review BP in 3 months. If BP is still high, start drug treatment.

Start drug treatment *immediately* if a history of a CVD e.g. angina, or has diabetes or kidney disease or has two CVD risk factors:

1. Male, 2. Obesity, 3. Smoker currently, 4. Age > 60, 5. Family history of CVD < 50 years in a first degree relative.

**ADVISE ALL PATIENTS TO STOP SMOKING!**

**BP 160-179/ 100-109: Stage 2 hypertension**

Advise lifestyle changes and start drug treatment immediately. (exercise, low salt diet, lose weight if needed, and **STOP SMOKING!**)

**BP > 180/ 110: Severe hypertension**

Start drug treatment **immediately** before leaving the clinic and monitor patient for one hour or longer for response before discharge.

If patient has emergency symptoms such as stroke symptoms, acute coronary symptoms or end-organ damage, refer immediately after treatment (e.g. IV furosemide or hydralazine)

**Medication Management**

Does patient have diabetes, significant proteinuria or aged less than 55?

NO

YES

**Blood Pressure Target for Diabetics**

<130/80 mmHg

**Step 1: Start ACE Inhibitor**

Enalapril 5mg daily. Gradually increase dose - usual maintenance dose 10-40 mg daily. *Do not use in females of child-bearing age/pregnant.*

**Step 2. Add calcium channel blocker.** (See Step 1 for non-diabetics)

**Step 3. Add thiazide-like diuretic** (See Step 3 for non-diabetics). Be aware may worsen hyperglycaemia in diabetics

Avoid B blockers as much as possible (masks hypoglycemia)

**Blood Pressure Target**

<140/90 mmHg

**Step 1: Start a calcium channel blocker (CCB)** e.g. Amlodipine initially 5mg, can increase to 10mg.

If BP still not controlled, *check adherence* and then add..

**Step 2: Add ACE Inhibitor** e.g. Enalapril 5mg daily. Gradually increase dose - usual maintenance dose 10-40 mg daily. *Do not use in females of child-bearing age/pregnant.*

**Step 3: Add thiazide-like diuretic**  
Hydrochlorothiazide 12.5mg (starting dose) once daily If BP not controlled, increase Hydrochlorothiazide to 25mg once daily (50mg maximum dose)

*May make dosage adjustments or add on drugs every two weeks until stable. May have 30 day drug supply after that at provider discretion.*