Hypertension Pathway

This pathway has been developed from published guidance, in collaboration with local cardiologists.

This guidance is to assist GPs in decision making and is not intended to replace clinical judgment.

**Clinical Commissioning Group**

Camden

Dietetic patients

Measure BP at least annually in an adult without previously diagnosed hypertension or renal disease. For those patients with a diagnosis of hypertension who consistently meet their target BP measure BP at least every 4 months. Offer lifestyle advice.

**Type 2 DM**  
BP should be <140/85 mmHg (or <130/80 mmHg if there is nephropathy, ischaemia, or cerebrovascular damage).

**Type 1 DM**  
Decisions about antihypertensive treatment will usually be made by the patient in consultation with secondary care. For those patients with features of metabolic syndrome, the threshold for starting antihypertensive treatment is BP >130/80 mmHg. For further information please refer to the local hypertension management guideline.

**Diabetic patients**

Measure patient blood pressure (BP)  
- If no albuminuria or features of metabolic syndrome, start antihypertensives if BP >135/90 mmHg. 
- If raised triglycerides, increased waist circumference, or on Rx for this lipid abnormality, measure BP at least annually in an adult without previously diagnosed hypertension or renal disease. 
- If BMI >29.7 kg/m² in South Asian men or >25 kg/m² in Caucasian men, repeat measure BP at least every 10 years.

**Lifestyle interventions**

Consider specialist referral to exclude secondary hypertension and a more detailed assessment of potential target organ damage. This is because 10% of patients with cardiovascular risk assessments can understand the lifetime risk of cardiovascular events in these people.

**ClinVR or ABPM/HBP**

If difference >10 mmHg between arms on the same day, consider alternative causes for target organ damage.

**Offer to check blood pressure at least every 3 years, or annually if systolic >150 – 160mmHg or diastolic >85 – 90mmHg.**

**Review BP, lifestyle factors, cardiovascular risk, and symptoms and inappropriate review of medications annually.**

**References**


*Correspondence & inquiries relating to medication:*

CCEG Medicines Management Team  
 Camden@cmrg.cmm.org.uk

*Refer to current SPC or SPC for full medicines information. Clinical Contact for pathway queries: Camden.pathway@nhs.net*
Antihypertensive drug treatment flowchart

**Step 1**
Aged < 55 years or Type 2 diabetic (any age)

ACE Inhibitor (ACEI) or low cost angiotensin receptor blocker (ARB) if true intolerance to ACEI**
(ACEI - Lisinopril, Ramipril capsules or Enalapril) (ARB - Losartan)

*Beta-blocker* (Atenolol) although not preferred initial therapy can be considered in younger patients (non-diabetic)***

**Step 2**

CCB (Amlodipine) OR Thiazide diuretic if CCB contraindicated/not tolerated (Bendroflumethiazide)

**Step 3**

ACEI or low cost ARB if true intolerance to ACEI**
(ACEI - Lisinopril, Ramipril capsules or Enalapril) (ARB - Losartan)

PLUS

CCB (Amlodipine) OR Thiazide diuretic if CCB contraindicated/not tolerated (Bendroflumethiazide)

Consider adding a fourth antihypertensive drug and/or seeking specialist advice:

- ACEI or low cost ARB if true intolerance to ACEI**
- CCB (Amlodipine) PLUS
- Thiazide diuretic (Bendroflumethiazide)

**Step 4**
Resistant Hypertension

If blood potassium level is 4.5 mmol/L or lower (consider higher dose thiazide diuretic)

- Low-dose spironolactone (25 mg OD) if blood potassium level is 4.5 mmol/L or lower (consider higher dose thiazide diuretic if blood potassium higher than 4.5mmol/L) OR

If further diuretic therapy is contraindicated/not tolerated/ineffective, consider an alpha blocker (Doxazosin immediate release) OR beta-blocker (Atenolol) OR in type 2 diabetics a potassium-sparing diuretic

If BP continues to be uncontrolled, seek specialist advice

* Adapted from Barnsley CCG ‘Choosing drugs to lower blood pressure and reduce cardiovascular risk August 2012.11
** If an ACE inhibitor is prescribed and not tolerated e.g. due to an intolerable cough, a low cost ARB can be offered as an alternative.
*** Younger patients include; those with an intolerance or contraindication to ACEIs or ARBs, women of child-bearing potential or those with evidence of increased sympathetic drive.

Purple text indicates Camden’s preferred medication choice