KISS: Hypertension

NICE NG136 August 2019 Click here for visual summary

- *Diagnosis/assessment/monitoring of hypertension:*
  - Hypertension should be confirmed ideally by use of ambulatory BP monitoring (ABPM)
  - However, if ABPM unsuitable **home BP monitoring (HBPM) may be used** - if using HBPM record BP morning and evening for 7 days (minimum 4), discard readings on the first day and use an average of the remaining readings
  - **Hypertension diagnosis confirmed in those with clinic BP ≥ 140/90 AND ABPM/HBPM ≥135/85**
    - Stage 1 = clinic BP 140/90-159/99 and ABPM/HBPM 135/85-149/94
    - Stage 2 = clinic BP 160/100-179/119 and ABPM/HBPM ≥ 150/95
  - Either clinic readings or HBPM may be used for monitoring hypertension
  - For adults <40 with hypertension consider specialist referral for secondary causes/treatment

- *Antihypertensive drug treatment* (always together with lifestyle advice):
  - **Offer** drug treatment to those (any age) with **stage 2 hypertension**
  - **Discuss** starting drug treatment in those with **stage 1 hypertension AND**:
    - Target organ damage, CVD, renal disease, diabetes, OR
    - **10 year CVD risk ≥10%** (and **consider** drug treatment in younger adults <60 years old even if CVD risk <10% as the 10 year risk may underestimate lifetime risk)
    - *Discuss individual CVD risk and preferences for treatment, **including no treatment,** and explain risks and benefits before starting drug treatment* - click here for patient decision aid
  - **Consider drug treatment** if aged ≥ 80 years old with clinic BP ≥ 150/90

- ***Targets*** (based on clinic readings so add 5/5 to HBPM):
  - Aged < 80 years old <140/90
  - Aged ≥ 80 years old <150/90 (but use clinical judgement in those with frailty or multimorbidity)
  - Use **STANDING BP readings if postural drop ≥20 mmHg** or symptoms of postural hypotension

- *Drug treatment:*
  - Step 1:
    - ACEI or ARB (if <55 and not African or Caribbean family origin, or patient with diabetes)
    - CCB for all others - if CCB not tolerated (e.g. oedema) use thiazide diuretic
  - Step 2:
    - If on ACEI/ARB add either CCB or thiazide
    - If on CCB add ACE/ARB or thiazide (ARB in preference to ACEI if African or Caribbean origin)
  - Step 3:
    - **Before considering triple therapy check drugs at optimal doses and review concordance**
    - If further treatment required combine ACE/ARB + CCB + thiazide
  - Step 4:
    - Before considering further treatment confirm elevate readings with ABPM or HBPM assess for postural hypotension and check concordance
    - If further treatment required options include spironolactone (if K ≤4.5 mol/l), further diuretic, alpha or beta blocker; if still not controlled on 4 drugs seek expert advice

- *Severe hypertension (stage 3 hypertension = clinic BP ≥ 180/120):*
  - Refer for **same day specialist assessment** if BP ≥180/120 AND
    - Signs of retinal haemorrhage/papilloedema or suspected pheochromocytoma or life-threatening symptoms (e.g. new-onset confusion, chest pain, heart failure or new renal failure)
  - If **BP ≥180/120 and no signs above:**
    - Investigate for target organ damage ASAP
    - If target organ damage present start drug treatment without waiting for ABPM/HBPM readings
    - If no target organ damage, repeat BP readings within 7 days