

## Detection and management of hypertension 2007

- Measure blood pressure at least 5 yearly in adults without hypertension and BP < 135/85mmHg
- If BP 135-139/85-89mmHg, offer lifestyle advice and measure BP annually
- If BP  $\geq$  140mmHg systolic and/or  $\geq$  90mmHg diastolic, then
  - Perform urinalysis, U&E, e GFR, blood glucose, total and HDL cholesterol, ECG, BMI / waist measurement
  - Assess co-morbidity and consider secondary causes
  - Discuss cardiovascular risk and offer lifestyle advice – diet, reduce salt, exercise, limit alcohol, achieve ideal weight, smoking cessation
- BP  $\geq$  180/110mmHg exclude accelerated hypertension or suspected pheochromocytoma
- BP  $\geq$  160mmHg systolic and/or  $\geq$  100mmHg diastolic confirm over 1-12 weeks (depending on severity) and treat
- BP consistently 140-159mmHg systolic and/or 90 – 99mmHg diastolic treat **if high risk**
  - Known vascular disease, diabetes, end organ damage present (LVH on ECG, eyes, kidneys), CKD, 10 year CVD risk  $\geq$  20% (use charts)
- Target BP < 140/90mmHg (no diabetes), < 130/80mmHg (diabetes and CKD without proteinuria), < 125/75 (diabetes with microalbuminuria / nephropathy, CKD with urine protein 2+ or more)

### Other actions

- Prescribe aspirin 75mg od (if no contra indications)
- For patients with vascular disease
- Age  $\geq$  50 yrs and end organ damage, diabetes, or 10yr CVD risk  $\geq$  20% when BP controlled (< 150/90mmHg)
- Prescribe statins within FATS

### Notes

- Ensure accurate blood pressure measurements; see supporting notes
- Referral, ambulatory BP or home BP monitoring, women treated with the OC / HRT, older people, people with co-morbidity; see supporting notes
- If no response to a drug, discuss concordance

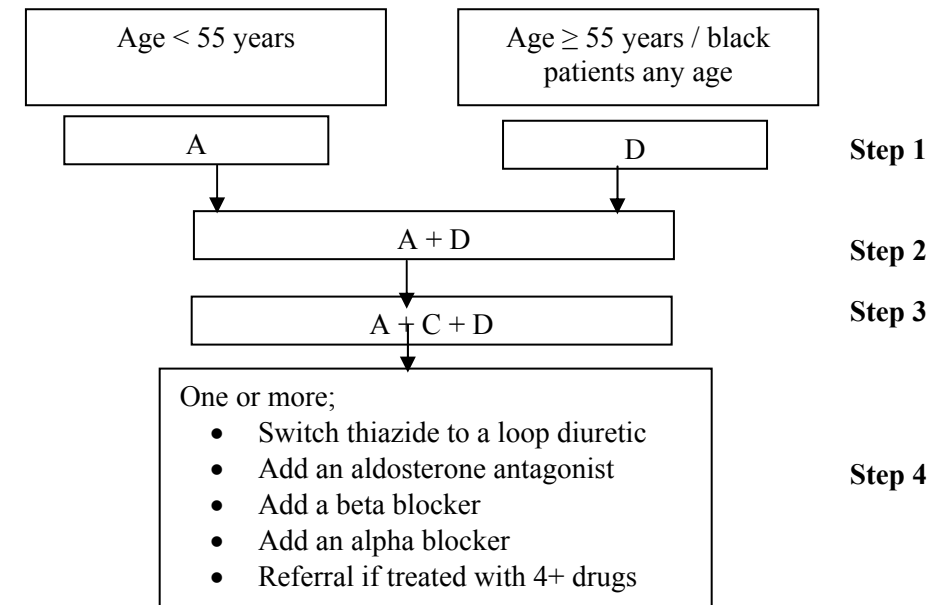
Agreed with Primary and Secondary care users, Newcastle and North Tyneside  
This will be reviewed in the light of new evidence and guidelines

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## Choice of anti hypertensive drug treatment 2007

- Ensure discussion with the patient of the benefits and side effects of treatment at each stage
- BP lowering is more important than the agent used
- Moderate doses of two drugs are preferred, rather than high dose of one
- Aim for once daily drug regimens
- Drug choice depends on relative indications and contra-indications . It is assumed that contra indications have been excluded, and drugs will be monitored (refer to the BNF as required)

### DRUG FLOW



A = ACE inhibitor e.g. lisinopril or ramipril (1st line in heart failure, LV dysfunction, diabetes and microalbuminuria / nephropathy, some other diabetes, CKD).

D = diuretic e.g. bendroflumethazide

C = calcium channel blocker e.g. nifedipine LA or amlodipine (consider diltiazem or verapamil in CHD if beta blocker contra-indicated)

Beta blocker e.g. atenolol (1st line in CHD)

Alpha blocker e.g. doxazosin (1st line if BPH symptoms and being treated)

Angiotensin II receptor antagonists; e.g. irbesartan or candesartan. Second line – consider as alternative if ACE inhibitor cough