

# Guidelines for the management of adults with hypertension in Bradford and Airedale

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REVIEW DATE: NOV. 2001

Advise patients with hypertension

- B** Not to smoke
- A** To eat less salt
- A** To be more physically active
- A** To keep alcohol intake to recommended weekly amount
- A** To eat a healthy diet
- A** To achieve ideal body weight

CHD Assess

- Urine strip protein, sugar and blood
- Serum Creatinine and Electrolytes
- Blood glucose
- Serum total Cholesterol HDL ratio
- ECG
- Assess CHD risk using prediction chart

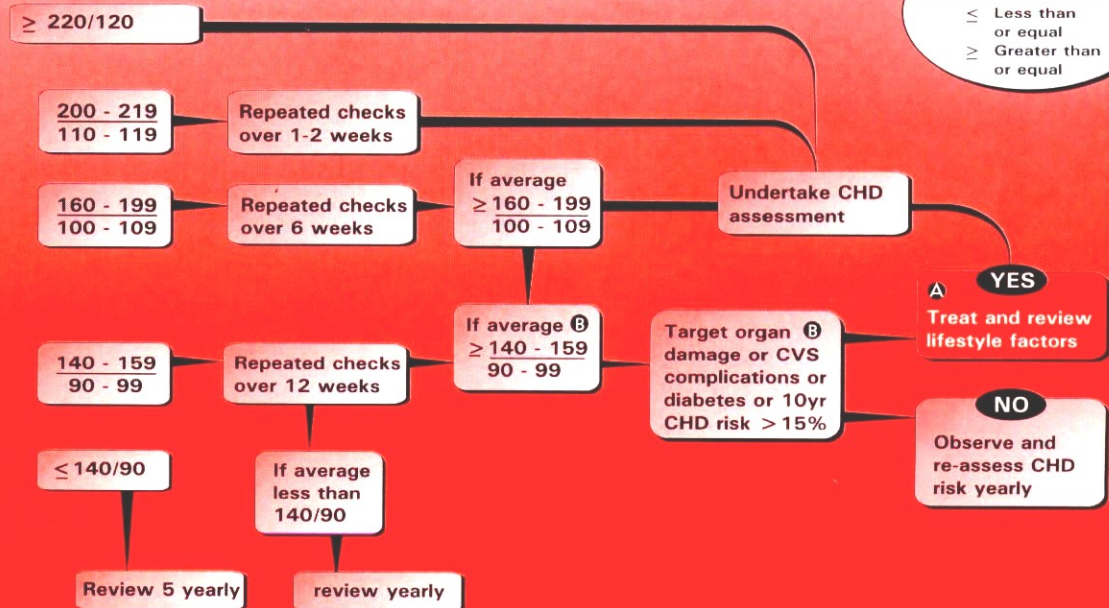
## MANAGEMENT AND ACTION

### Blood Pressure Measurement **C** Follow BHS guidelines in technique

- Ideally all adults should have BP monitored every 5 years.
- Use device with validated accuracy, that is properly maintained and calibrated.
- Measure sitting BP routinely: standing BP in elderly or diabetic patients.
- Remove tight clothing, support arm at heart level, ensure hand relaxed.
- Use cuff of appropriate size.
- Lower mercury slowly, by 2 mm per second.
- Read BP to the nearest 2 mmHg.
- Measure diastolic as disappearance of sounds (phase 5).
- Take two measurements at each visit.
- Use the average for several visits when estimating cardiovascular risk in mild hypertension.

#### KEY

- ≤ Less than or equal
- ≥ Greater than or equal



Guidelines have been developed by a multi-professional team from across Bradford and Airedale

## EQUIPMENT ADVICE

Equipment used for clinical blood pressure measurement must be accurate to within  $\pm 3$ mm mercury. All blood pressure measurement devices should have their calibration checked regularly, mercury annually, aneroid 6 monthly and digital annually or biannually. If considering replacing equipment, please see separate purchasing guidelines. Contact Janice Joyce (01274) 366019 or Frances Armes (01274) 364144 at BRI Medical Physics who will provide expert advice.

### Choice of Antihypertensive Drug Treatment See BNF for full details of drug interactions, warnings and key points.

- Use a low dose of thiazide as first-line treatment unless there is a contraindication or a compelling indication for another drug class **A**
- Long acting dihydropyridine calcium antagonists are a suitable alternative for isolated systolic hypertension in the elderly when low-dose thiazide is not tolerated or contraindicated **A**
- Choice of drug will depend on relative indications and contra-indications in the individual patient. (see table below).
- Less than half of all hypertensives will be controlled on monotherapy and one-third will require three or more drugs **A**

Compelling and possible indications, contraindications and cautions for the major classes of antihypertensive drug

Class of drug	Compelling indications	Possible indications	Possible contraindications	Compelling contraindications
<b>Alpha-blockers</b>	<b>Prostatism</b>	<b>Dyslipidaemia</b>	<b>Postural hypotension</b>	<b>Urinary incontinence</b>
<b>ACE-inhibitors</b>	<b>Heart Failure LV dysfunction Type 1 diabetic Nephropathy</b>	<b>Chronic renal disease Type 2 diabetic Nephropathy</b>	<b>Renal impairment PVD</b>	<b>Pregnancy Renovascular disease</b>
<b>All-antagonists</b>	<b>ACE inhibitor-induced Cough</b>	<b>Heart failure Intolerance of other antihypertensive drugs</b>	<b>PVD</b>	<b>Pregnancy Renovascular disease</b>
<b>Beta-blockers</b>	<b>Myocardial infarction Angina</b>	<b>Heart failure</b>	<b>Heart failure Dyslipidaemia PVD</b>	<b>Asthma/COPD Heart block</b>
<b>Calcium antagonists (dihydropyridine)</b>	<b>Elderly ISH</b>	<b>Elderly Angina</b>	-	-
<b>Calcium antagonists (rate-limiting)</b>	<b>Angina</b>	<b>Myocardial infarction</b>	<b>Combination with Beta-blockade</b>	<b>Heart block Heart failure</b>
<b>Thiazides</b>	<b>Elderly</b>		<b>Dyslipidaemia</b>	<b>Gout</b>

- For the third line drug therapy commonly used combinations are:

Diuretic  
Ace inhibitor and  
Long acting calcium  
channel blocker

or

Diuretic  
Beta-blocker and  
Long acting calcium  
channel blocker

### READ CODES

G3 -Hypertension disease  
G31 -Essential Hypertension

G32 -Hypertension heart disease  
G33 -Hypertension renal disease

G34 -Hypertension renal and heart disease  
G35 -Secondary Hypertension

G36 -Malignant Hypertension  
G3Z -Hypertension disease NOS