Hypertension in older people

Quick Reference Guide

Older patients with hypertension have a higher absolute benefit from treatment since they are at higher risk of vascular events and tolerate antihypertensive treatment at least as well as younger patients. Number needed to treat (NNT) to prevent one death in patients aged:

- *under 60 years = 167*
- *over 60 years = 72*

☑ For patients over the age of 75, a blood pressure check should be performed in those who attend for their annual health care check.

Practices should also have a strategy for case finding in the 60-75 year age group.

C A full assessment of cardiovascular risk should be carried out for all hypertensive patients. Treatment thresholds should take into account the level of blood pressure and other risk factors.

A A target blood pressure of < 140/90 mm Hg is a reasonable goal for most hypertensive patients. Even a small reduction in blood pressure is worthwhile if targets prove difficult to achieve.

SBP ≥160 mm Hg or **DBP ≥100 mm Hg** on three separate occasions **(moderate/severe hypertension)**

Initiate **lifestyle measures**

Begin **drug treatment**

SBP 140-159 mm Hg or **DBP 90-99 mm Hg** on several occasions **(mild hypertension)**

Initiate **lifestyle measures**

Pre-existing vascular disease?

no

Assess CHD risk using Joint British Chart

10 year CHD risk <15% and no target organ damage

Reassess annually

10 year CHD risk ≥15% or target organ damage

Begin **drug treatment**

yes

Assess other risk factors, target organ damage and associated clinical conditions

Event risk very high (>30% over 10 years)

Begin **drug treatment**

Target organ damage

- Left ventricular hypertrophy *(ECG or echo)*
- Proteinuria and/or creatinine >150 µmol/l
- Atherosclerotic plaque *(x-ray or ultrasound evidence in carotid, iliac, or femoral arteries, or aorta)*

Associated clinical conditions

- Cerebrovascular disease *(ischaemic stroke, haemorrhagic stroke, TIA, vascular dementia)*
- Cardiovascular disease *(MI, angina, congestive cardiac failure)*
- Renal disease
- Peripheral vascular disease
- Aortic aneurysm
- Retinopathy

KEY A B C indicates grade of recommendation ☑ good practice point

SIGN Publication Number 49

LIFESTYLE MODIFICATION

- C Lifestyle measures aimed at controlling hypertension should be recommended in all cases
- B Reduce alcohol intake if >21 units/week for men, >14 for women
- A Eat more fruit and vegetables, less saturated fat and salt
- A Reduce weight if overweight or obese (BMI ≥25.0)
- A Take regular exercise
- B Stop smoking

ADDITIONAL DRUG THERAPY

A **Aspirin 75 mg daily**
if no contraindication,
BP controlled to <150/90 mm Hg
and cardiovascular complications,
target organ damage,
10 year CHD risk >15%
or 10 year CVD risk >20%

Lipid lowering therapy
may be required: see the SIGN guidelines on lipids and primary prevention of CHD and secondary prevention of CHD following MI
(SIGN guidelines 40 and 41)

ANTIHYPERTENSIVE DRUG TREATMENT

Start therapy at any square and use add-on therapy on either side as shown by the arrows.
Drugs in adjacent squares have additive antihypertensive effects, complementary actions, and are usually well tolerated.
Multiple combinations may be required.

A **Thiazide diuretics**
as first line therapy for treatment of hypertension in older patients

A Use low doses to minimise biochemical and metabolic problems

A **ACE inhibitors** as first line therapy for patients with IDDM, proteinuria, LVSD; or as alternative or supplementary therapy to thiazide diuretics
if no renal artery stenosis

☑ **Angiotensin II antagonists** as alternative to ACE-I if cough is adverse effect

Centrally acting drugs
as additional therapy in refractory hypertension or as alternative therapy when other drugs are contraindicated

α-blockers as
supplementary therapy

A **β-blockers** as alternative or supplementary therapy to thiazide diuretics

A Long-acting dihydropyridine **calcium antagonists** as alternative therapy to thiazides or supplementary to other therapy, particularly in isolated systolic hypertension

B Avoid short-acting calcium antagonists

Derived from the national clinical guideline recommended for use in Scotland by the Scottish Intercollegiate Guidelines Network (SIGN), Royal College of Physicians of Edinburgh, 9 Queen Street, Edinburgh EH2 1JQ

Available on the SIGN website: www.sign.ac.uk