JBS2: Joint British Societies Guidelines on Prevention of Cardiovascular Disease in Clinical Practice

PCCS

New guidelines will focus on preventing fatal or non fatal atherosclerotic cardiovascular (CV) events. This can be achieved through lifestyle and risk factor intervention (using targets) and appropriate drug therapy. Clinical practice in preventing CVD should focus on high risk groups and equal priority should be given to the following groups:

People with established symptomatic atherosclerotic cardiovascular disease (CVD) (previously known as secondary prevention)

People at high risk of developing symptomatic atherosclerotic CVD – estimated as ≥ 20% over 10 years using the risk prediction chart (previously known as primary prevention)

People with Type 1 or 2 diabetes mellitus

In addition those who have the following single conditions are considered to be at high risk of CVD regardless of other risk factors:

- Elevated blood pressure ≥ 160 mm Hg systolic or ≥ 100 mm Hg
- Elevated total cholesterol to HDL cholesterol ratio of ≥ 6.0
- Familial dyslipidaemia
- Family history of premature CVD

Recommended Treatment Targets

Blood Pressure

< 140 mm Hg systolic *and* < 85 mm Hg diastolic

People with established CVD, diabetes and chronic kidney disease
< 130 mm Hg systolic *and* < 80 mm Hg diastolic

Cholesterol

Total cholesterol < 4.0 mmol/L
and LDL-cholesterol < 2.0 mmol/L
Or
25% reduction in total cholesterol
and 30% reduction in LDL-cholesterol
Whichever gets to the lowest cholesterol level

Blood Glucose

Fasting glucose ≤ 6.0 mmol/L

Management Summaries

All people with established atherosclerotic cardiovascular disease (CVD) should be managed through lifestyle intervention. Other risk factor targets are recommended as follows:

Cholesterol: Reduce to recommended targets
Use a statin in all high risk people with established atherosclerotic disease
Use other classes of lipid lowering drugs in addition to a statin if recommended targets are not achieved

Blood Pressure: Reduce to recommended targets using the BHS AB/CD algorithm
ABCD algorithm to be updated in the forthcoming NICE/BHS guidance

Aspirin: Use 75 mg daily in those with coronary and peripheral atherosclerotic disease

Use 75-150 mg daily plus 200mg dipyridamole twice daily in those with cerebral infarction or transient ischaemic attack

Clopidogrel: Use 75 mg daily where aspirin is contraindicated or where a further event has occurred when taking aspirin/dipyridamole

B-blockers: Use following MI

ACE-inhibitors: Use for those with signs/symptoms of heart failure at time of MI, or those with persistent left ventricular systolic dysfunction ejection fraction < 40%
Consider for others with coronary artery disease if blood pressure not below target (consider using ARB as alternative)
Use in combination with thiazide in people with stroke especially if blood pressure is not below target

Anticoagulates: Use for people at risk of systemic embolisation following MI, heart failure, left ventricular aneurysm, atrial fibrillation or paroxysmal tachyarrhythmias

All people at high risk of developing symptomatic atherosclerotic disease should be managed through lifestyle intervention. Other risk factor targets are recommended as follows:

Cholesterol: Reduce to recommended targets
Use a statin in all at high risk of developing CVD
Use a statin in all with Type 1 and 2 diabetes mellitus above 40 years (and those under 40 years with certain risk factors)
Use other classes of lipid lowering drugs in addition to a statin if recommended targets are not achieved

Blood Pressure: Reduce to recommended targets using the BHS AB/CD algorithm
ABCD algorithm to be updated in the forthcoming NICE/BHS guidance

Aspirin: Once blood pressure is controlled use 75 mg in those aged > 50 years with a total CVD risk ≥ 20%

Use 75 mg in people with diabetes who are ≥ 50 years or who are younger but have had diabetes for more than 10 years

Changes from the first Joint British Societies Recommendations (1998)

JBS1

- Covers people with CHD & those at risk of developing CHD
- BP target for non diabetes
  < 140 mm Hg systolic *and* < 85 mm Hg diastolic
  Diabetes
  < 130 mm Hg systolic *and* < 80 mm Hg diastolic
- Total cholesterol < 5 mmol/L
  (LDL-cholesterol < 3 mmol/L
  Or
  33% reduction of LDL-cholesterol from baseline in secondary prevention
  Whichever gets to the lowest cholesterol level

JBS2

- Covers people with established CVD and those at high risk of CVD – all to be given equal priority in clinical practice (these populations have also been recognised as high risk in the NICE Statins Technology Appraisal, January 2006)
- BP target
  < 140 mm Hg systolic *and* < 85 mm Hg diastolic

  People with established CVD, diabetes and chronic kidney disease
  < 130 mm Hg systolic *and* < 80 mm Hg diastolic
- Total cholesterol < 4.0 mmol/L *and* LDL-cholesterol < 2.0 mmol/L
  Or
  25% reduction in total cholesterol *and* 30% reduction in LDL-cholesterol
  Whichever gets to the lowest cholesterol level

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