

Tip 15 (July 2010)

Management of Global Cardiovascular Risk – “Keep it Simple”

I have previously alluded to my problems with the NZ Cardiovascular Risk Guideline¹. The basic issue is that it (like many other similar guidelines) addresses only the short term risk of having a cardiovascular event (the trigger in the NZ guideline is a 15-20% risk of a cardiovascular event in the next 5 years). That's fine if you're a 70 year old man who's had a heart attack – you get the (pharmacological) book thrown at you, but if you're a younger person with so-called “isolated elevated single risk factors” you're out of luck. For example if you're a non-smoking woman of 40 with satisfactory lipids and a blood pressure of 160/95, you do not warrant antihypertensive treatment, nor do you warrant lipid lowering therapy if you are a normotensive woman of 40 with a cholesterol of 7 mmol/l.

What the NZ (and similar guidelines) do not tell you is that although the 40 year old woman with a blood pressure of 160/95 has a low 5-year cardiovascular risk, her lifetime risk is extremely high; as is that of the normotensive 40 year old woman with a cholesterol of 7mmol/l.

If we are serious about defeating cardiovascular disease (which is still our major killer), we should be aiming for primordial atherosclerosis prevention, and we are certainly not going to achieve that by limiting effective treatment to those with established cardiovascular disease and the highest short term risk only.

My other issue with the NZ guideline is that it is too complicated and ambiguous for busy GP's to find really helpful.

My personal “management of cardiovascular risk guideline”, based loosely on that of Kostis² is as follows:-

- (1) No smoking at any time**
- (2) Antihypertensive treatment of all (irrespective of age, gender, smoking, or lipid status) with sustained BP $\geq 140/90$, and $\geq 130/80$ for diabetes, chronic kidney disease, or history of heart attack, stroke, or peripheral vascular disease**
- (3) Statins for all (irrespective of age, gender, blood pressure or smoking status) with LDL cholesterol ≥ 2.5 mmol/l or HDL ≤ 1 mmol/l, and, irrespective of lipid profile, in diabetics, chronic kidney disease, or history of heart attack, stroke, or peripheral vascular disease**
- (4) Low dose aspirin for all men over 45 and women over 55, and irrespective of age all those with diabetes, chronic kidney disease, or history of heart attack, stroke, or peripheral vascular disease**

I recommend it to you for your patient (and yourselves when you are considering your own cardiovascular risk).

1. New Zealand Cardiovascular Guidelines Handbook: - 2009 Edition - March 2009
2. A New Approach to Primary Prevention of Cardiovascular Disease. Kostis JB.
A.J.Med.2007;120:747-747