

Other lipid lowering agents

- Do not routinely offer fibrates or anion exchange resins for primary or secondary prevention, but consider either of these options if statins are not tolerated.
- Do not offer nicotinic acid for primary prevention, but consider it for secondary prevention in people who cannot tolerate statins.
- Do not offer an anion exchange resin, fibrate, or nicotinic acid combined with a statin for primary prevention.
- Consider people with primary hypercholesterolaemia for ezetimibe treatment (see the NICE technology appraisal on ezetimibe⁶).

Overcoming barriers

Effectively implementing the recommendations for primary prevention depends on a structured, systematic approach to identifying people at high risk of cardiovascular disease. Formal risk assessment will require good communication with patients and education on the meaning of the risk and the benefits and risks of treatment. Standard models of care should include advice and support in lifestyle changes for both primary and secondary prevention. The costing tool

being developed by NICE can be used to estimate additional costs (www.nice.org.uk/CG67).

Contributors: Both authors contributed equally to drafting and revising the summary. NO'F is the guarantor.

Funding: The National Collaborating Centre for Primary Care was commissioned and funded by the National Institute for Health and Clinical Excellence to write this summary.

Competing interests: None declared.

Provenance and peer review: Commissioned; not externally peer reviewed.

- 1 National Institute for Health and Clinical Excellence. *Lipid modification: cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease*. London: NICE, 2008. www.nice.org.uk/CG67
- 2 Anderson KM. Cardiovascular disease risk profiles. *Am Heart J* 1991;121:293-8.
- 3 National Institute for Health and Clinical Excellence. *Statins for the prevention of cardiovascular events in patients at increased risk of developing cardiovascular disease and those with established cardiovascular disease*. London: NICE, 2006. www.nice.org.uk/TA094
- 4 National Institute for Health and Clinical Excellence. *Hypertension: management of hypertension in adults in primary care*. London: NICE, 2006. www.nice.org.uk/CG34
- 5 National Institute for Health and Clinical Excellence. *Obesity—the prevention, identification, assessment and management of overweight and obesity in adults and treatment*. London: NICE, 2006. www.nice.org.uk/CG43
- 6 National Institute for Health and Clinical Excellence. *Ezetimibe for the treatment of primary (heterozygous familial and non-familial) hypercholesterolaemia*. London: NICE, 2007. www.nice.org.uk/TA132

Commentary: Controversies in NICE guidance on lipid modification for the prevention of cardiovascular disease

Francesco P Cappuccio

Clinical Sciences Research
Institute, University of Warwick
Medical School,
Coventry CV2 2DX
f.p.cappuccio@warwick.ac.uk

BMJ 2008;336:1248-9
doi:10.1136/bmj.39554.624086.AD

The new guidelines from the National Institute for Health and Clinical Excellence (NICE) on lipid modification for the prevention of cardiovascular disease will guide the way we assess cardiovascular risk and treat lipids, both in primary and in secondary care. What are the new aspects, and what is it that might spark controversy in this new publication?

Risk assessment

To identify those requiring primary prevention of cardiovascular disease, the guideline reaffirms the threshold of a 10 year cardiovascular disease risk >20% in people aged over 40 years. Its recommendation of a systematic, rather than opportunistic, risk assessment is welcome, particularly in primary care. The new guidelines wisely reaffirm the 1991 Framingham risk score as the score of choice for guiding primary prevention.

However, they also retain subjective, non evidence-based adjustments. They advise increasing the risk estimate by 1.5-2.0 in the presence of premature family history and by 1.4 in South Asian men, and suggest clinical judgment for socioeconomic status and severe obesity. This is a missed opportunity for tackling at

least some of these matters, such as the ethnic variations in vascular risk, with an evidence based approach.

The Framingham risk does not perform well in ethnic groups in the United Kingdom,¹ and in the absence of UK cohort studies with significant proportions of black and ethnic minority groups, a web based tool (ETHRISK) has been developed for primary care physicians to allow for such variation.² This pragmatic tool is based on a recalibration of existing Framingham risk scores against survey data on ethnic group risk factors and disease prevalence compared with the general population to produce 10 year risk in seven British black and ethnic minority groups. This could have been incorporated into most primary care computer systems. Although the tool is not ideal, its use in clinical practice would have at least partially prevented inequalities in cardiovascular disease prevention that are not easily overcome by subjective judgment.

Lifestyle advice

The approach to lifestyle advice is disappointing. It perpetuates the belief that, as each listed measure has been proved to reduce cardiovascular risk, providing such collective advice will be effective. This is not the case.³ Maybe a more tailored, patient centred approach

should be used. For instance, focusing on smoking cessation in a patient who smokes but has normal blood pressure and is within ideal body weight would be more effective than offering the entire preventive package. Having said this, the list of effective measures for primary prevention has a glaring omission: it fails to mention reducing salt intake as a tool to prevent cardiovascular disease through blood pressure control, as recently reaffirmed by the World Health Organization.^{4,5}

Statins and targeting cholesterol levels

The NICE guidelines now recommend the use of statins for the primary prevention of cardiovascular disease in adults who have a 10 year cardiovascular disease risk >20%. They reinforce the preferential use of simvastatin for primary prevention, as supported by both intervention trials on cardiovascular end points and by economic appraisal. Lower dose pravastatin is recommended as a cheap alternative, but this neglects compelling data from the randomised controlled ASCOT trial,⁶ which used low dose atorvastatin (10 mg once daily) in high risk patients such as those targeted by the current guidelines. The study was stopped earlier than planned (median follow-up 3.3 years rather than 5 years) owing to the large reduction in major cardiovascular events in the intervention group (36%; 95% confidence interval 17% to 50%).

Finally, for secondary prevention, the guidance reaffirms the need to increase statin doses until total cholesterol is <4.0 mmol/l, or low density lipoprotein cholesterol is <2.0 mmol/l, as in the Joint British Societies' JBS 2 guidelines.⁷ Introducing an "audit level" of cholesterol and an "ideal target" resembles the

useful approach advocated in the British Hypertension Society's hypertension guidelines.⁸

Conclusion

Although the new NICE guidance on lipid modification comes closer to other guidelines issued by professional societies, it misses important opportunities for further improvement. It has taken two steps forward and one back—slow progress but progress.

Contributors: FPC is the sole contributor.

Competing interests: None declared.

- 1 Cappuccio FP, Oakeshott P, Strazzullo P, Kerry SM. Application of Framingham risk estimates to ethnic minorities in the UK and implications for primary prevention in general practice: a cross sectional population based study. *BMJ* 2002;325:1271-4.
- 2 Brindle P, May M, Gill P, Cappuccio FP, D'Agostino R Sr, Fischbacher C, et al. Primary prevention of cardiovascular disease: a web-based risk score for seven British black and minority ethnic groups. *Heart* 2006;92:1595-602.
- 3 Little P, Kelly J, Barnett J, Dorward M, Margetts B, Warm D. Randomised controlled factorial trial of dietary advice for patients with a single high blood pressure reading in primary care. *BMJ* 2004;328:1054-7.
- 4 World Health Organization. *Reducing salt intake in populations: report of a WHO forum and technical meeting*. Geneva: WHO, 2007:1-60.
- 5 Cappuccio FP. Salt and cardiovascular disease. *BMJ* 2007;334:859-60.
- 6 Sever PS, Dahlöf B, Poulter NR, Wedel H, Beevers G, Caulfield M, et al. Prevention of coronary and stroke events with atorvastatin in hypertensive patients who have average or lower-than-average cholesterol concentrations, in the Anglo-Scandinavian Cardiac Outcomes Trial-Lipid Lowering Arm (ASCOT-LLA): a multicentre randomized controlled trial. *Lancet* 2003;361:1149-58.
- 7 British Cardiac Society, British Hypertension Society, Diabetes UK, HEART UK, Primary Care Cardiovascular Society, Stroke Association. JBS 2: Joint British Societies' guidelines on prevention of cardiovascular disease in clinical practice. *Heart* 2005;91(suppl 5):v1-52.
- 8 Williams B, Poulter NR, Brown MJ, Davis M, McInnes GT, Potter JF, et al. Guidelines for management of hypertension: report of the fourth working party of the British Hypertension Society, 2004-BHS IV. *J Hum Hypertens* 2004;18:139-85.

Rubber gloves

The manager of the older people's mental health day assessment unit was sitting with her feet on the desk, a broad grin on her face, and a red box in her hand, telephoning the supplies department. The box had been unpacked by the unit's cleaner and was found to contain, rather than the 200 non-latex gloves she had ordered, 200 non-latex condoms.

The manager finally managed to persuade the supplies receptionist that these were not really what we wanted and that the gloves were a more useful alternative, and the budget didn't stretch to both. But were they not what we wanted?

In the emotionally safe environment of the day unit, we found that many patients had been revealing to us their sexual worries, and their self perceived sexual misdemeanours. The number of such discussions had been increasing to the extent that a training workshop for staff was organised for us to learn more about relationship and sexual needs of older people. This was a thought provoking, though somewhat giggly, session. It emphasised that we can talk with older people about sexual matters, and we became better able to understand the underlying issues when "inappropriate"

sexual activity in people with dementia is reported by families or carers in homes and sheltered flats.

For a sensible introduction to sex in old age, try the Help the Aged website, www.helptheaged.org.uk/en-gb/. Despite its antiquated name (who else uses the term "aged" these days?) it is extremely forward thinking.

Another myth of activity in old age is that older people do not use the internet. If you are an older person interested in sex, in old relationships and new, take a look at the website—and follow the website's safety advice: "If you are starting out on a new sexual relationship it is important, if a little unromantic, to think about your sexual health. Not having to worry about unwanted pregnancies does not mean that you should throw caution to the wind: sexually transmitted diseases are on the increase in the UK, and it's not all down to young people."

Should we have kept the condoms?

Claire Hilton consultant
Mental Health Service for Older Adults,
Northwick Park Hospital, Harrow
claire.hilton@nhs.net