2016 ESC/EAS Guidelines for the Management of Dyslipidaemias FREE

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The Task Force for the Management of Dyslipidaemias of the European Society of Cardiology (ESC) and European Atherosclerosis Society (EAS)

Developed with the special contribution of the European Assocciation for Cardiovascular Prevention & Rehabilitation (EACPR)

Guidelines summarize and evaluate all available evidence on a particular issue at the time of the writing process, with the aim of assisting health professionals in selecting the best management strategies for an individual patient with a given condition, taking into account the impact on outcome as well as the risk–benefit ratio of particular diagnostic or therapeutic means. Guidelines and recommendations should help health professionals to make...

Topic:

- dyslipidemias
- ldl cholesterol lipoproteins
- high density lipoprotein cholesterol
- triglycerides
- statins
- lipoproteins
- cardiovascular diseases
- cardiovascular disease risk factors
- kidney failure, chronic
- diabetes mellitus, type 2
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Issue Section:

Comments

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Vascular age charts, SCORE and the new “2016 ESC/EAS Guidelines for the Management of Dyslipidaemias”

20 December 2016 | Jose I Cuende

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The new 2016 ESC/EAS Guidelines for the Management of Dyslipidaemias have been released recently(1). The 2016 Guidelines focus on a particular problem that relates to young people with high levels of risk factors: a low absolute risk may conceal a high relative risk requiring advice for intensive lifestyle measures. The approach to this problem in 2016 version of the Guidelines is the same than 2012(2) and 2016(3) European Guidelines on cardiovascular disease prevention in clinical practice: calculation of the cardiovascular risk age.

The concept of vascular age or heart age was introduced in 2008 by D’Agostino and cols(4), who established that an individual’s heart age is calculated as the age of a person with the same predicted risk but with all other risk factor levels in normal ranges. They published heart age/vascular age tables derived from the general cardiovascular risk profile obtained from the Framingham Heart Study.

Other vascular age charts were published in 2010 based on the same concept but with SCORE project model(5). These charts are similar to original coloured SCORE charts but with vascular age inside each coloured box. They are the first specific vascular age charts published based on SCORE project. Also, it was demonstrated for the first time that vascular age does not need to be recalibrated: agreement in vascular age between high-risk countries charts and low-risk countries charts was almost total with a intraclass correlation coefficient of 0.997, avoiding the need of recalibration and allowing a broad use of them.

Comparing what it is said about vascular age in both series of guidelines (2012 and 2016 European Guidelines on cardiovascular disease prevention and 2016 guidelines of dyslipidaemias) it is astonishing to see that whole section “2.3.2 Cardiovascular risk age” from the prevention guidelines(3) is included in the dyslipidaemias guidelines(1) word for word except cites. Both guidelines state “Risk age has been shown to be independent of the CV endpoint used”, what was demonstrated in 2012 (with a partial SCORE dataset) as quoted in 2016 prevention guidelines cite 68(6). Because of it, dyslipidaemias guidelines cites 51 and 52 are incorrect (even cite 51 dates from 2009, before SCORE vascular age were published). Both cites are in no way related to SCORE vascular age. Also, both guidelines state “Risk age can be used in any population… and therefore avoids the need for recalibration”. Prevention guidelines refer to the original publication(3) (cite 69), but in dyslipidaemias guidelines it has been ommited. Perhaps, there were manuscript errors that can be amended by changing original cites 51 and 52 for cites 68(6) and 69(5) from 2016 prevention guidelines. A similar error occurred in 2012 prevention guidelines(2) and it was changed after publication.

The new 2016 dyslipidaemia guidelines present a method of estimating vascular risk age with the SCORE charts, not with specific vascular age charts, so that risk age can be estimated visually by looking at the SCORE chart. This method is useful only where there is no high absolute risk and for a maximum absolute risk of 2% in females and 4% in males. It is surprising that the new guidelines suggest this method without mentioning the specific SCORE vascular age charts(5) that are useful for the full range of absolute risk and age that appears in the SCORE charts.

Risk estimation is necessary for management of patients and vascular risk age is a useful tool for communicating risk to them and to get them to comply with lifestyles and drug treatments. The 2010 SCORE vascular age charts(5) can be used with the 2016 ESC/EAS Guidelines for the Management of Dyslipidaemias.

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Addendum:

Item 1. What “2016 European Guidelines on cardiovascular disease prevention in clinical practice” says:

“Risk age has been shown to be independent of the CV endpoint used (68), which bypasses the dilemma of whether to use a risk estimation system based on CV mortality or on total CV events. Risk age can be used in any population regardless of baseline risk and secular changes in mortality, and therefore avoids the need for recalibration (69). At present, risk age is recommended to help communicate about risk, especially to younger people with a low absolute risk but a high relative risk.”

Item 2. What “2016 ESC/EAS Guidelines for the Management of Dyslipidaemias” says:

“Risk age has been shown to be independent of the CV endpoint used (51-52), which bypasses the dilemma of whether to use a risk estimation system based on CVD mortality or on the more attractive but less reliable endpoint of total CVD events. Risk age can be used in any population regardless of baseline risk or secular changes in mortality, and therefore avoids the need for recalibration. At present, risk age is recommended for helping to communicate about risk, especially to younger people with a low absolute risk but a high relative risk.”

Figures:
https://academic.oup.com/DocumentLibrary/EHJ/commentfiles/GLeletter704752figures.pdf

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