Importance of Definition and Technique When Using Noninvasive Coronary Angiography to Diagnose Myocardial Bridging. Response

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Available online 14 February 2013

REFERENCES


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http://dx.doi.org/10.1016/j.rec.2012.11.009

http://dx.doi.org/10.1016/j.rec.2012.12.006

Carotid Intima-media Thickness and Morbidity and Mortality in Spain: A Definitive Prospective Study Is Needed

El grosor intima-media carotídeo requiere un estudio prospectivo de morbilidad en España definitivo

To the Editor,

We have read with interest the article entitled “Carotid Intima-media Thickness in the Spanish Population: Reference Ranges and Association With Cardiovascular Risk Factors” published in the Revista Española de Cardiología, and consider that the questionable aspects of this determination continue to outweigh its utility in cardiovascular prevention. The authors demonstrate a very weak correlation with cardiovascular risk factors, which is strongest for age, followed by high-density lipoprotein cholesterol. We feel that the results of this study warrant several considerations. The first is that the European Society of Cardiology’s guidelines for cardiovascular disease prevention specify that the detection of subclinical vascular disease helps to improve estimation of cardiovascular risk in intermediate risk patients. Moreover, these results are not substantiated by specifically designed, randomized, prospective trials, and thus do not reach a level A recommendation, although they do attain level B. The only two techniques that receive a class Ila recommendation are assessment of carotid intima-media thickness (IMT) and the ankle-brachial index.

Secondly, measurement of carotid IMT has 3 key limitations. Firstly, its independent predictive value is fairly low and this technique is practically useless in the reclassification of individual risk; secondly, progression of IMT does not correlate with an increase in the incidence of cardiovascular events. Thirdly, drug-induced regression or stabilization is not associated with reductions in the complications rate. Some of these aspects are shared with the ankle-brachial index, although the latter has some strong points, such as its independent predictive value when its values are abnormal, even in the absence of clinical evidence of claudication, and its additive role in the presence of other vascular lesions or even in combination with advanced age. Moreover, these findings were reported in a Spanish population.

A final question is to consider what carotid IMT assesses: cerebrovascular involvement or the total atherosclerotic burden? Risk factors have a differential effect on the development of complications in distinct areas, given that hypertension and smoking confer a greater risk of stroke, whereas lipids and diabetes mellitus are associated with a higher risk of ischemic heart disease. The results of Grau et al. appear to indicate that carotid IMT reflects the total atherosclerotic burden because of its association with age and high-density lipoprotein cholesterol, one of the major determinants of acute coronary syndrome in our patient...