ATHEROSCLEROSIS EASY CIMT MEASURES WILL DO

Carotid intima–media thickness (CIMT) is measured by ultrasonography and correlates with the extent of coronary heart disease (CHD), but some segments of the carotid artery are easier to image than others. A team of US-based scientists has now shown that relatively simple measurements of the common carotid artery (CCA-IMT) are just as good at predicting CHD risk than a more-frequently used method that involves the imaging of all carotid-artery segments (A-CIMT).

Vijay Nambi and colleagues had a fresh look at baseline ultrasonography data for 12,576 participants of the American Atherosclerosis Risk in Communities (ARIC) study from 1987–1989. The team classified patients in categories of varying CHD risk on the basis of CCA-IMT or A-CIMT measurements. Results of a sweep of the carotid arteries for the presence of atherosclerotic plaques were taken into account in both cases. Although 8–10% of individuals fell into different risk categories depending on which test was used, both techniques were comparable regarding the prediction of CHD-related events of ARIC participants, who were followed for an average of 15.1 years. The researchers suggest that replacing A-CIMT with the easier and quicker CCA-IMT might allow for more-efficient clinical trial protocols.

One limitation of the study is the use of old ultrasonography data, as A-CIMT measurements should be less problematic on modern equipment. Furthermore, as atherosclerosis frequently develops in the internal carotid artery, some aspects of disease development might be missed by imaging mainly the common carotid artery. Nambi would now like to investigate whether the quantification of plaque volume with 3D-ultrasonography further improves the predictive power of the test.

Christoph A. Schmitt

Original article Nambi, V. *et al.* Common artery intima–media thickness is as good as carotid intima–media thickness of all carotid artery segments in improving prediction of coronary artery disease risk in the Atherosclerosis Risk in Communities (ARIC) study. *Eur. Heart J.* doi:10.1093/eurheartj/ehr192