



## NEWS IN BRIEF

### CT CORONARY ANGIOGRAPHY – “NON-NEGLIGIBLE” CANCER RISK

64-slice coronary CT angiography has become a common diagnostic test, although there is limited data on the associated cancer risk from radiation exposure. In a study published in the *Journal of the American Medical Association (JAMA)*, a group of researchers led by Andrew Einstein attempted to address this question.

The researchers used computational methods to estimate organ doses of radiation from 64-slice CT coronary angiograms. The lifetime attributable risk (LAR) of cancers was estimated using a report from the National Academy of Sciences on Biological Effects of Ionising Radiation (BEIR).

Their estimates showed organ doses of 42 to 91 mSv for lungs and 50 to 80 mSv for the female breast. Lifetime cancer risks for standard cardiac scans varied from one in 143 for a 20-year-old woman to one in 3,261 for an 80-year-old man. A combined scan of the heart and aorta resulted in increased lifetime attributable risk, up to one in 114 for a 20-year-old woman.

If a special protocol ECTCM (ECG-controlled tube current modulation) was used during the coronary CT, the risk is decreased to one in 219 for the 20-year-old woman and one in 5,017 for the 80-year-old man. ECTCM coronary CT risks for a 60-year-old woman and 60-year-old man were one in 715 and 1 in 1,911, respectively.

The estimates here suggest that the use of 64-slide coronary CT angiograms has a non-negligible lifetime attributable risk of cancer, with this risk being greater for women, younger patients and where combined cardiac and aortic scans are used.

(Source: *JAMA* (2007) 298:317-323)

### PERIPHERAL ARTERIAL DISEASE: WARFARIN AND ANTIPLATELET THERAPY

In a study published in the *New England Journal of Medicine*, 2,161 patients with peripheral arterial disease were randomly assigned, either to antiplatelet therapy alone, or to a combination therapy of antiplatelet and oral anticoagulant agents. For combination therapy, the target INR was 2.0 to 3.0.

After nearly three years follow-up, there were no significant differences between the two groups, in terms of MI, stroke, death from cardiovascular causes, or severe ischemia of peripheral or coronary arteries.

On the other hand, combination therapy had a significantly increased risk of bleeding, including life-threatening bleeding.

(Source: *NEJM* (2007) 357:217-227)

### OBESITY: IT'S WHO YOU KNOW...

Using data from the Framingham Heart Study, a team of researchers performed analysis of social networks. They found that a person's chances of becoming obese increased by 57% in a given period if a friend became obese, 40% if a sibling did, and 37% if a spouse did. Environment factors did not seem to be adequate explanation, as these effects were seen even if the obese friend lived some distance away.

The data are published in the *New England Journal of Medicine*. An editorial on this issue notes that social network analysis represents a relatively untapped source of knowledge, for the understanding of disease and its management. ■

(Source: *NEJM* (2007) 357:370-379)