

Coronary Calcium Score as Powerful Screening Method for Cardiovascular Diseases (Literature Review)

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Abstract

Calcification of the coronary arteries is a quite common characteristic finding at chest CT, especially in elderly and smoking patients. The standardised method of evaluation of coronary artery calcification is a calcium score. Coronary calcium, quantified on ECG-gated CT examinations, is the strong predictor of cardiovascular events in the asymptomatic population. A zero calcium score stands alone as perhaps the most powerful «negative risk factor» for near-term development of a coronary event, particularly in patients with an intermediate-risk. According to international guidelines, the calcium score should be used in patients with intermediate risk or low risk with a cardiovascular family history. On the other hand, most of these patients may be candidates for lung cancer screening chest CTs, especially old patients and heavy smokers. The possibility of using standard and low-dose protocols of chest CTs in determining the calcium score is quite promising.

Key words: Calcium Score, Coronary Artery Calcification, Lung Cancer Screening, Low-dose Computed Tomography, Coronary Artery Disease.

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