

ANGIOSKANERI I ZEMRES-APLIKIMET, INDIKACIONET DHE EKSPERIENCA JONE NE DIAGNOSTIKIMIN E ATEROSKLEROZES SUBKLINIKE

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Summary

CORONARY ANGIOSCANNING-APPLICATIONS INDICATIONS AND OUR EXPERIENCE IN THE DIAGNOSIS OF SUBCLINICAL ARTEROSCLEROSIS

Background-Coronary artery disease (CAD) is the leading cause of death in most European countries, including Albania. Conventional coronary angiography is the gold standard technique for diagnosis of CAD, due to its superior spatial and temporal resolution.

The diagnostic value of conventional coronary angiography has been challenged by the emergence and fast growing use of a less invasive imaging technique, multislice computerized tomography (MSCT) angiography. The diagnostic accuracy of MSCT angiography in CAD has been significantly augmented with the increased performance of MSCT from early generation of the 4-slice CT to 16-slice, 64-slice, dual-source CT and the latest models such as 256-slice and 320-slice CT scanners. This is mainly demonstrated by the improved spatial and temporal resolution from the latest MSCT scanners such as 64 or more slice scanners. In particular, MSCT angiography has been reported to demonstrate a very high negative predictive value (more than 95%), indicating that it can be used as a reliable technique for excluding patients suspected of CAD, thereby reducing the need for invasive coronary angiography and optimizing medical therapy in these patients.

Purpose: To evaluate the use of MSCT angiography in diagnosis of subclinical CAD in correlation with traditional risk factors in Albanians based on our own experience.

Method and Technique: This is a prospective study including 372 patients with no history of CAD who underwent CT angiography of coronaries (CTAC) in our hospital from September 2008 to August 2011. Risk estimation of fatal and non-fatal CVE was assessed using Systematic Coronary Risk Evaluation (SCORE) and then CT scan was performed with a 64 detector CT including Ca Score and angiography of coronaries with iv contrast.

Results: An increase in likelihood of CAD was observed in the presence of one, two and three or more risk factors and with an increasing value of SCORE. About 18% of subjects with CAD did not report any traditional risk factors (SCORE 0).

Conclusion: CTAC is a reliable, very accurate noninvasive technique for the diagnosis of early CAD, especially in the low-intermediate risk patients compared to the traditional evaluation schemes. Thus, CTAC may help in further optimising the risk reduction strategies for CVE on an individual basis.

Skaneri i zemres i ka fillimet qe ne vitet 90 me EBCT (electron beam CT). Nje nder zbatimet e para te skanerit te zemres ka qene diagnostikimi dhe matja e kalcifikimeve te arterieve koronare, e quajtur Ca-Score, sipas metodës Agatson, e cila perdoret edhe sot. Studime te shumta kane treguar se Ca-score eshte

nje test diagnostikues me vlere prediktive negative te larte per perjashtimin e SAK (semundjes se arterieve koronare), por me specificitet te ulet sidomos ne moshat me te reja per arsye te pamundesise se diagnostikimit te pllakave te buta ateromatoze vulnerable me risk te larte per rrupture.