The role of coronary computed tomography angiography in diagnostics of coronary disease

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Cardiovascular diseases continue to be a root cause of the mortality and morbidity in the world. Early detection is key for a timely, efficient curing of the coronary artery disease (CAD). Coronary computed tomography angiography (MSCT coronarography) is an image-based, non-invasive diagnostic method that excludes the CAD with certainty and enables a reliable diagnostics of CAD.

AIM: Proving adequacy of MSCT coronarography in diagnostics of CAD.

PATIENTS AND METHODS: In the period 2011-2013 in the SUNCE-AGRAM Polyclinics in Sarajevo 356 procedures on patients of both sex were completed. The test was done on MSCT Somatom Definition dual source, 64 slice Siemens device. The test bolus technic was used; the subsequent evaluation was performed in the Circulation program by applying multiplanar reformation, maximum intensity projection, curved multiplanar reformation, and volumen rendering.

RESULTS: The processing of test results has shown that out of total of 356 patients. 104 patients had negative test results on the coronary arteries, 252 patients were diagnosed with atherosclerotic changes: non-significant stenosis, stenosis of marginal significancy and significant stenosis, and occlusions of coronary arteries.

CONCLUSION: MSCT coronarography is a non-invasive, safe and reliable method for an early detection of CAD. It provides for a reliable evaluation of atherosclerotic changes on the coronary arteries and mobility and potency of placed stents and grafts. MSCT coronarography is integrated in a daily clinical practice and diagnostic algorithm of CAD.

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LITERATURE

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