Importance of Multislice Cardiac Computed Tomography For The Diagnosis and Evaluation of Silent Ischemia and Myocardial Infarction: Two Cases.

Faruk Erzengin, Mustafa Özcan, Erhan Teker, Kıvanç Yalın, Güneş Hüseynova, Derya Baykız, Kamil Adalet

Istanbul University, Faculty of Medicine, Department of Cardiology, Çapa, Istanbul, TURKEY.

Corresponding author
Prof. Dr. Faruk Erzengin
I.U. Istanbul Medical Faculty Çapa, Istanbul, TURKEY
Gsm: +90 532 453 51 79
E-mail Address: farukerzengin@gmail.com.

Currently, Multislice Computed Tomography (MSCT) is a very useful and an important tool for the noninvasive evaluation and during the intervention of coronary arterial pathology(1-13). We present the assessment of coronary artery disease in a 82-year-old male and another 57-year old male using a MSCT coronary angiography with 64-slice technology which was first described by Leschka S et al (5). First patient was admitted to the Cardiology Department with exercise dispnea, and palpitation from time to time for about one month. ECG and Exercise ECG (Maxi-mal effort test) were normal. The patient who was a medical doctor denied directly conventional coronary angiography and 64-slice multi-detector CT technique was performed (Fig.1). Coronary artery plaque leading to severe coronary artery stenosis (%95) at the middle segment of LAD was detected and served as a guide for doing coronary angiography and for determining type and size of the stent. Single coronary lesion (LAD) was detected by coronary angiography (Fig.2) and the result was completely parallel to MSCT. Percutaneous coronary intervention was performed for LAD lesion and a drug-eluting stent was implanted after predilatation. The patient was exam-inved routinely every three month. He was asymptomatic at the end of the three years after the procedure.

Second patient was admited with trivial sore throat together with minimal diaphoresis and was admited to the Cardiology Department with elevated of cardiac enzymes. His ECG (Fig.3) showed slightly prominent and non significant T waves on V2-3. In the noninvasive technique (MSCT-Fig.4), completely total occlusion in the proximal segment in the left circumflex artery and critical stenosis(%98) at the middle segment of LAD were detected and invasive coronary angiography was done and the result was completely parallel to MSCT (Fig.5). This patient had a subacute silent posterior myocar-
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In conclusion the 64-slice multi-detector cardiac computed tomography is a very important device for the diagnosis, evaluation and the guidance for the treatment of silent ischemia and myocardial infarction.

Figure 3: Normal ECG of Case 2.

Dial infarction. Percutaneous coronary intervention and predilation was performed firstly for the total occluded circumflex artery and was opened successfully, and then to the critical lesion of LAD. Drug-eluting stents were implanted in these two lesions. The patient was examined routinely in every three months. This patient was also asymptomatic at the end of the two years and four months after the procedure.

Figure 4: MSCT of Case 2. Cx totally occluded (thick arrow), a significant stenosis of LAD (thin arrow).

Figure 5: Total occlusion of Cx artery (thick arrow), significant stenosis of LAD artery (thin arrow) with standard coronary angiography of Case 2.
REFERENCES


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