

8th Global

Cardiologists & Echocardiography Annual Meeting

July 18-20, 2016 Berlin, Germany

Comparative study between the degree of coronary artery stenosis estimated by coronary intervention and extent of calcium score estimated by multislice CT in Egyptian patients with low and intermediate calcium scores

Ehab E El-Hefny¹, Ahmad Sabry², Mohamed Abumandour¹ and Abdelghaffar H Mahmoud¹¹Al-Azhar University, Egypt²Kobry Al-Kobbah Military Hospital, Egypt

In this work 100 Egyptian patients of age range (53.89±8.11 years) with suspected CAD were included, they underwent full clinical evaluation, coronary calcium score in all calcified lesions along the major epicardial arteries and the whole-heart Agatston score measured using the multi-slice spiral computed tomography. Coronary angio was done to all patients for proper evaluation of degree of coronary stenosis. In the study group, one, two, three and four coronary lesions were found in 40%, 19%, 32% and 8% respectively, while the related median total calcium score was found to be 104, 78, 36 and 249 respectively. LM artery showed Agatston score of 11.73, 128.65 and 241.6 in normal, mild and significant stenosis respectively with P value of P<0.001. LAD artery showed Agatston score of 3.21, 35.3, 68.27 and 87.92 in normal, mild, significant and total occluding lesions respectively with P value of P<0.001. CX artery showed Agatston score of 33.42, 73.09, 11.54 and 12.14 in normal, mild, significant and total occluding lesions respectively with no significant correlation. RCA artery showed Agatston score of 5.58, 0, 4.16 and 101.7 in normal, mild, significant and total occluding lesions respectively with P-value of P<0.001. In this work – First to study an Egyptian population – the Calcium score estimated by non-invasive multi-slice CT in the studied group with low and intermediate calcium scores does not correlate closely with the degree of coronary artery stenosis estimated by coronary angiography and does not correlate with the known international figures and grades for Agatston score. A question about the pathophysiology of the plaque formation in Egyptians and possibly opening the door for specific preventive measures is to be considered.

Biography

Graduate of Al-Azhar University in Cairo, Egypt and specialized in Cardiology since being a resident in the dept. of Cardiology. International training in the University of Pittsburgh medical center, USA (preventive Cardiology). Later in the university of Britania occidentale in France (Interventional Cardiology). Full professor of Cardiology and director of the cath lab, Al-Azhar uni. Member of the post graduate teaching and examining board. Supervised and evaluated more than 40 research projects for Master and Doctorate degrees in national universities in Egypt. Consultant of the National health organization in Egypt. Reviewer In the Egyptian Journal of hospital Medicine.

ehabelhefny@hotmail.com

Notes: