Role of 2-dimensional speckle tracking echocardiography in diagnosis of coronary artery disease instable angina pectoris patients

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In this work 120 patients suspected of having stable angina pectoris were included, they were presented for evaluation of chest pain and to whom clinical evaluation, echocardiography, nuclear scanning and coronary angiography were done. They were classified into group (A) 40 control patients considered as control group with normal coronaries, and group (B) 80 patients with significant CAD. The study showed that regarding the echo parameters, there were statistically significant differences between the 2 groups regarding the A wave, E/A ration, DT, Em and E/EM also regarding SLSS and GLS 17 and GLS 12 as well as SLSr, GLSr 17 and GLSr 12. Significant difference was present regarding number of vessels affected as regard GLS 12, GLSr 12 and GLSr 17. In comparison with the results of MPI, there were positive correlation between the number of segments affected in MPI and GLS 12 and GLS 12. A statistically significant correlation was also found between the 17 segments in MPI, SLSS and SLSr parameters. Myocardial strain by speckle tracking is superior to conventional echo. Parameter measurements of global and segmental LS using 2DSE and it is more sensitive tool in the identification of WMA at rest than visual analysis and that support its use to risk stratifies atherosclerotic CAD. It is found that 2DSE is not inferior to the MPI in the non-invasive diagnosis of CAD.

Biography

Ehab E El-Hefny is a Graduate of Al-Azhar University in Cairo, Egypt and specialized in Cardiology since being a resident in the Department of Cardiology. He did his international training in the University of Pittsburgh Medical Center, USA (Preventive Cardiology) and later in the University of Britania Occidentale in France (Interventional Cardiology). He is the Full Professor of Cardiology and Director of the Cath lab, Al-Azhar University Member of the post graduate teaching and examining board. He supervised and evaluated more than 40 research projects for Master and Doctorate degrees in national universities in Egypt. He is the consultant of the National health organization in Egypt and also Reviewer in the Egyptian Journal of Hospital Medicine.

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