عنوان مقاله:

Two-dimentional speckle tracking strain imaging in the assessment of myocardial diastolic function in patients with stable angina pectoris

محل انتشار:

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خلاصه مقاله:

Introduction: Ischemic heart disease is caused mainly by obstruction of coronary arteries. The ischemic assessment through echocardiography is dependent on wall motion abnormality detection during systole. In patients with ischemic heart disease the diastolic function is impaired before systolic function and measurement of regional diastolic dysfunction if possible will be most sensitive for assessment of obstructed coronary artery region. This study was designed to determine whether regional left ventricular delayed relaxation diagnosis could be detected with strain imaging derived from two-dimensional speckle-tracking echocardiography in patients with coronary artery disease.Methods: All the articles reviewed were obtained using MEDLINE & ScienceDirect (up to October 2014). All data extracted by speckle tracking echocardiography. The index which is used is strain imaging diastolic index which is calculated as: (A-B) A×100 . A is the amount of strain at the time Aortic value closure and B is the amount of strain in first one-third point of diastolic duration.Result: Four articles were reviewed. Three articles assessed patients with echocardiography at rest and one with stress echocardiography. All articles showed the coronary artery tracking with significant stenosis is possible by regional deformation analysis through two-dimensional strain.Discussion: The usage of strain images obtained through two-dimensional speckle tracking has been validated for the quantitation assessment of regional dysfunction in ischemic heart disease. Regional LV delayed relaxation diagnosis with strain imaging is a reliable method after treadmill stress test.Conclusion: Strain imaging is reasonable for evaluation of ischemia as a low cost noninvasive test with high accuracy.

کلمات کلیدی:

Coronary Artery Disease, Strain imaging, Stress Echocardiography

لینک ثابت مقاله در پایگاه سیویلیکا: