Functional Parameters of the Left Ventricle in Patients with Ischemic Heart Disease Using Velocity Vector Imaging

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Abstract

The aim of the investigation was to estimate the diagnostic capabilities of left ventricular functional indices in patients with coronary heart disease using conventional echocardiography techniques and Velocity Vector Imaging. 52 patients were examined. By visual estimation of left ventricular segmental contractility all patients were divided into two groups: without left ventricular contractile dysfunction (n = 26); with segmental contractile dysfunction (n = 26). The use of Velocity Vector Imaging system enables to study in more detail the characteristics of left ventricular function and reveal the alteration of those indices which are not found in visual control. The investigation of left ventricular function using Velocity Vector Imaging included the study of longitudinal, radial and circular left ventricular fibers. Patients of both groups were found to have dysfunction of longitudinal and circular fibers of myocardium.

Key words: Coronary Heart Disease, Velocity Vector Imaging, Left Ventricular Function.

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