Introduction

Assessment of left ventricular wall motion is one of the most important aspects in evaluating left ventricular function. Evaluation of regional wall motion abnormality in patients with left ventricular asynergy is particularly important, because regional wall motion is closely related to the status of the cardiac muscle in these local areas (fujii et al., 1984).

In acute myocardial infarction, early measures of left ventricular global systolic performance appear to be strong prognostic predictors (white et al., 1987).

The association of left ventricular wall motion abnormality with myocardial infarction and myocardial ischemia is well established by using two dimensional echocardiography but no standard has evolved and all these methods remain impractical for routine clinical use and its subjective methods depending on the reader's experience (Hager et al., 1979).

Two-dimensional echocardiography can depict endocardial excursion and wall thickening in real time, but it remains subjective with interobserver variability known to be high. Quantitative techniques that have been developed require offline computer analysis of 2-d echocardiograms. They are time consuming and impractical for clinical use. (vermes et al., 2000).

Introduction

Color. Kinesis is a new echocardiographic technique based on tissue characterization which provides a color – encoded map of endocardial motion. (vermes et al., 2000).

Color kinesis allows color encoding of endocardial motion in real time, the major advantage of this modality is that it provides the basis for objective and automated evaluation of regional systolic and diastolic function, which may have a direct impact on the diagnosis of various myocardial disease states and, in particular coronary artery disease (Mor – Avi et al., 1999).