Summery

To evaluate the LV wall motion by tissue Doppler imaging we studied 50 patients there age ranged from 35 to 65 years. Each patient was subjected to:

- **Careful history analysis and clinical examination.**
- **12 leads surface ECG.**
- **2D echo and tissue Doppler imaging study.**
- **Cardiac catheterization.**

The patients were divided into three groups:-

1. **Group 1: 20 patients with old anterior myocardial infarction.**
2. **Group 2: 20 patients with old inferior myocardial infarction.**
3. **Group 3: 10 normal subjects (as control group).**

Patients with dilated cardiomyopathy, arrhythmias, rheumatic heart disease and left bundle branch block were excluded from the study.

Our results showed that tissue Doppler imaging was more powerful, more specific and more sensitive than 2D-Echocardiography in detection the left ventricular wall motion abnormality where myocardial velocity and myocardial velocity gradient was reduced in the infracted region up to (MV 1 cm/sec. And MVG from 0.3 to 0.5 s^{-1}).

Our results showed that tissue Doppler parameters (MV & MVG) was reduced in the region which supplied by the stenotic artery and this also found by cardiac catheterization (coronary angiography and left ventriculogram).

In conclusion this results showed that tissue Doppler imaging was permitted in detection left ventricular wall motion abnormality than 2D-Echo as it was not depend on the eyeball variation of subjects.