*Abstract:*

*Noninvasive evaluation of cardiac function in nonhypertensive and asymptomatic diabetic patients*

*Mohammadi, T.[1]Babapour,B.[2]*

*[1]Faculty of Medicine*

*[2]MD, Department of cardiology Emam Khomeini hospital Ardabil, University of Medical Sciences*

*Introduction and Objective: Type 2 diabetes is a major cardiovascular risk factor.such as HTN ,HLP and smoking.A primary diabetic cardiomyopathy represents a high risk factor of heart failure in the absence of ischemic, valvular and hypertensive heart disease in the diabetic population. CAD is more common in diabetic patients and it is almost asymptomatic.*

*Unquestionably, an early detection of LV damage and CAD is a major goal for the prevention of cardiac disease in the diabetic population*

*Method and Materials: this study was done as Cross-Sectional method,The study sample consisted of 40 patients with type 2 diabetes mellitus without hypertension and cardiac symptoms(mean age 47 years) who recoursed to diabetes clinic of Ardabil Emam Khomeini Hospital during 2009-2010.Left ventricular (LV) function was studied by echocardiography.and exercise test with Bruce protocol was done, Data of patients were collected , and then data were inserted in special form and were analyzed with statistical software's like SPSS.*

*Results: The sample volume of this study was 40 people, all of them had a normal systolic function.22 cases(55%) had diastolic dysfunction,and 8 people(20%) had a positive stress test,whom all had diastolic dysfunction too.($p<0/001$)*

*Conclusion: This study showed that an impairment of left ventricular diastolic function occurs early in the natural history of diabetes mellitus.and CAD is more common in diabetic patients with diastolic dysfunction.*

*Keywords: diastolic dysfunction,CAD,exercise test,Diabetes*