

**Cardiac Structural and Functional Changes Evaluated  
by Echocardiography and Two-Dimensional Strain in  
Patients with Beta Thalassemia**

By

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Doppler imaging and two dimensional Strain echocardiography.

**Result:** The left and right Tei index is significantly higher in thalassemic patients than those of the controls(**P <0.0001**). The global strain value was significantly lower in thalassemia patients than those of the controls (**p <0.0001**).

**Conclusions:** Tissue Doppler imaging is superior to conventional echocardiography in giving an early evidence of systolic and diastolic dysfunction asymptomatic cardiac dysfunction in thalassemia patients. Evaluation of global strain was useful in assessing cardiac functions and predicting myocardial iron overload.