

**INTRODUCTION  
AND  
AIM OF THE WORK**

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Thalassemia consists of several genetically determined disorder, due to unequal synthesis of hemoglobin chain, that cause ineffective erythropoiesis, hemolysis and anemia,. the patients need repeated blood transfusions, so that chronic administration of large quantities of blood and an inappropriate increase in iron absorption from the gastrointestinal tract inevitably lead to severe hemosiderosis and impaired hepatic, endocrine and cardiac function (Dealarcon et al.,1979 ).

Thalassemia is the most common type of chronic hemolytic anemia in mediterranean countries. Diwany 1944, had reported the first cases of thalassemia in Egypt (El-sadek, 1991).

Cardiac disorders related to biventricular failure are the most frequent cause of death in these patients (Engle 1969) .Initial cardiac changes has been documented by using conventional echocardiographic - doppler techniques (Henry 1978, valdz 1982), even in thalassemics without clinical manifestation of heart failure (Leon 1979, Freeman 1983).

Chelation therapy has been used in an attempt to minimize iron deposition and many patients now recive an intensive chelation regimen, nevertheless the ability to detect cardiac complications remains a major problem in the mangement, it is essential that these complications must be identified at an early stages because

clinical evidence of cardiac dysfunction is a late and carries a poor prognostic event, the recognition of subclinical abnormalities could indicate a need for more aggressive treatment .

The aim of this study is to asses the left ventricular mass as a new measure reflecting the cardiac condation in these patients.