SUMMARY AND CONCLUSIONS

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Thalassemia consists of several genetically determined disorders, due to unequal synthesis of hemoglobins, that cause ineffective erythropoiesis, hemolysis and anemia.

Cardiac complication are the leading cause of death in patients with thalassemia syndroms, the cardiac complications are due to chronic anemia and iron overload.

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

This study included 48 cases of B thalassemia major, subjected to clinical, laboratory, and echo- doppler studies.

The thalassemic cases were divided into two groups, one received chelation therapy and other did not.

Echo -doppler was used in all cases to assess the structure and function of the heart, and LVM was calculated and corrected to height.

Concerning the structural changes we found that left atrial, aortic root, right ventricle, pulmonory artery, posterior wall and septal thickness were greater in non chelated patients than chelated patients but only PA was statistically significant in males and LVPW was statistically significant in females.

also LVEDD and LVESD were significantly greater in non chelated patients than chelated patients.

The left ventricular mass to height ratio was significantly greater in non chlated patients than chelated patients, and it was increased above normal limit in 100% of non chelated males, and also in 100% of non chelated and chelated females and in 91.67% of chelated males.

Concerning EF% and FS were reduced in non chelated patients than chelated patients but only statisically significant in females.

We concluded that LVM/H as a measure in thalassemic patients can detect early subclinical cardiac abnormalities which may indicat a need for more aggressive treatment and it is very useful in follow up of thalassemic patients.