

This study had revealed that in B-thalassaemia major, serum Cu was significantly increased compared to control individuals and to thalassaemia minor patients ($p<0.01$ and $p<0.05$) respectively (Table 2 and figure 1). In addition, serum Zn was significantly increased in relation to healthy control and to thalassaemia minor patients, ($p<0.05$) {table 2 and figure 1}, while serum Mg in thalassaemia major

patients was significantly decreased in relation to healthy control ($p<0.05$) but its relation with thalassaemia minor was insignificant (Table 2 and figure 1).

In thalassaemia minor although serum Cu was significantly high when compared to healthy control but both serum Zn and Mg were not significantly changed when compared to control group (Table 2 and figure 1).

Table 2: Levels of serum Cu, Zn, Mg and ferritin in thalassaemia major, minor and control group

Parameters	Thalassaemia major n=72	Thalassaemia minor n=14	Control n=16
Cu (nmol/L)	30.094±6.319 ^{***†}	24.58±10.95 [*]	21.38±6.125
Zn (nmol/L)	1.14±0.198 ^{*†}	0.899±0.334	0.858±0.240
Mg (mg/dl)	2.111±0.427 [*]	2.145±0.623	2.428±0.684
S. ferritin µg/L (mean±SE)	1359.5±147.03 ^{****†††}	83.0±30.55 ^{**}	44.0±18.34

* All data are expressed as mean±SD except S. ferritin is expressed as mean±SE.

* $p<0.05$ correlation with control. ** $p<0.001$ correlation with control. **** $p<0.0001$ correlation with control.

† $p<0.05$ correlation with thalassaemia minor. ††† $p<0.001$ correlation with thalassaemia minor.

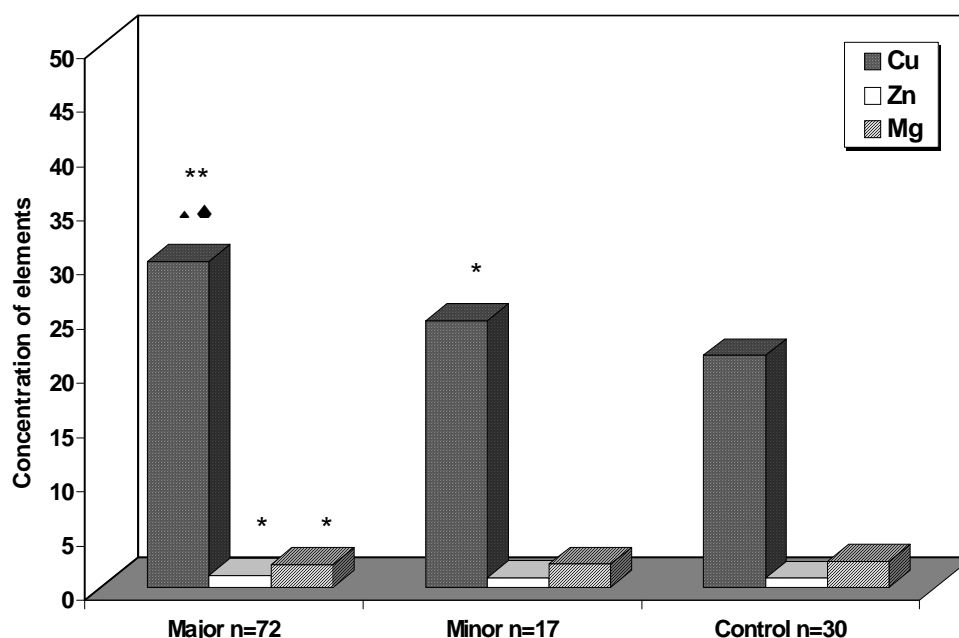


Figure 1: The concentration of serum Cu, Zn and Mg in thalassaemia major, minor and control.

* $p<0.05$ correspondent to control. ** $p<0.001$ correspondent to control.

♦ ♦ $p<0.01$ correspondent to minor.