CHAPTER VI

SUMMARY AND CONCLUSION

SUMMARY

Chronic liver disease in Egyptian children is one of the leading causes of morbidity and mortality in Egypt.

This study was carried out on 45 children aged between 2 years and 14 years including 30 males, 15 females and 15 normal control children of the same age group (11 males and 4 females).

They were selected from patients, admitted to El-Mounira children Hospital Cairo University in the year 1982 and 1983.

The main presenting features was hepatomegaly of some months duration. Their history, physical ecamination and investigations were carried out we pay much attention to the Enzymatic activity in the serum and its Correlation with both clinical and histopathological studies of the patients.

According to histopathological findings the cases were classified into the following 5 subgroups.

1.	Chronic active hepatitis	9 cases (20%)
2.	Post-hepatitic cirrhosis	11 cases(24.4%)
3.	Veno-occlusive disease	6 cases(13.3%)
4.	Pure-bilharzial hepatic fibrosis	12 cases(26.7%)
5.	Mixed (Shistosomiasis and other lesions)	7 cases(15.6%)

Each group was studied separately for its clinical picture and its correletion to both histopathological & biochemical investigations with laying an stress on the statistical analysis of biochemical results:

I. Chronic active group (20%).

The biochemical profile suggesting the diagnosis of C.A.H. according to our findings were :

- Serum transaminasss SGOT and SGPT increased by 4.5 - 8 folds the normal.
- Total serum protein was elevated.
- Marked hypergammaglobulinaemia by 3 folds of normal mean.
- Serum bilirubin was increased by 2 folds of normal range with the mean of 1.3 ± 0.8 mg %.

- Alkaline phosphatase was increased only by ½ fold of normal level.
- Serum L.D.H. was increased by about 3 folds of normal level.
- Serum GGT was found about 2.75 folds of normal level.

II. Post-hepatitic cirrhosis (22.4%)

The biochemical profile suggesting the diagnosis of P.H.C. according to our findings were:

- Mean serum albumin was 50% lower than the normal mean level.
- α_2 globulin of protein electrophoresis was increased above normal range.
- B globulin levels were found either slightly increased or within the normal range.
- Gammaglobulin level in protein electrophoresis wes elevated by more than 2 folds of the normal level.
- Serum bilirubin was increased by about 2.75 folds of normal level.

- Serum alaline phospatase was either within the normal level or very slightly increased.
- Serum transaminases were found to be increased by 2 folds of normal.
- Serum GGT iwas increased by about 3 folds of normal level.

III. Veno-occlusive disease(13.3%)

The biochemical profile suggesting the diagnosis of V.O.D. according to our findings were :

- Mean SGPT level was almost normal.
- Mean SGOT level was mildly elevated.
- Mean total serum protein levels were decreased by 25% below the normal level.
- Mean serum albumin was below normal by about 25% ofnnormal level.
- Mean α_1 globulin was markedly diminished by about 90% of the normal level.
- Serum gamma globulin was normal.
- Serum bilirubin was moderatly increased by 2 folds of normal level.

- Serum L.D.H. was very slightly increased or about normal.
- Serum GGT was high by about 3 folds of normal level.

IV. Pure hepatic schistosomiasis (26.7%)

The biochemical profile suggesting the diagnosis of pure hepatic schistosomiases according to our findings were:

- Total serum protein and serum albumin were decreased.
- Serum α_1, α_2 and B globulin were at normal level.
- Serum gammaglobulin was increased by 2 folds of the normal level.
- Serum transaminases were elevated by about 2½ folds of normal in SGPT and 5.5 folds of normal level in SGOT.
- Slight elevation of alkaline phosphatase by 1.75 folds of normal.
- Serum GGT activity was elevated to more than 3 folds of normal level.

IV. Hepatic bilharzial fibrosis with other lesions (mixed type) (15.6%)

The biochemical profile suggesting the diagnosis of hepatic bilharzial fibrosis with other hepatitis lesion according to our findings were:

- Marked elevation of both SGPT (mean level more than 7 folds of normal level) and SGOT (mean level was more than 12 folds of normal level).
- Total serum protein levels were near normal level.
- B-globulin mean level was 30% below normal level.
- Serum gammaglobulin was increased by 2.5 folds of normal level.
- Serum alkaline phosphatase was increased by 1.75 folds of normal.
- Serum LDH & Serum GGT were increased above normal by 2.5 and 3.5 folds of normal in sequence.

Out of these study we can concluded that it is possible to gain a great value from biochemical tests to confirm the diagnosis of chronic hepatic insult beside

the findings of histopathological biopsies.

It is very important to know the exact level of serum enzymes of different diseases relative to the normal level. It is either above normal level , normal or subnormal by adefinite number of folds.