SUMMARY AND CONCLUSIONS

Thirty normal subjects, thirty patients with intestinal bilharziasis and thirty patients with urinary bilharziasis of which fifteen complicated with malignant transformation were selected for this study. The following tests were applied

A - Biochemical tests:

I- SERUM

1- SERUM ENZYMES

- SGPT
- SGOT.
- L.D.H.
- ALKALINE PHOSPHATASE

2- N.P.N.

- Serum creatinine
- blood urea
- uric acid
- Amino acid

II- URINE

- PH
- B-glucuronidase
- L.D.H.

B - Organised elements

pus cells

Red cells

ova

C- Immunological test:

Erythrocyte resette active (T_1) and total (T_2) as a test of T Lymphocyte function.

The results showed the following:

I- There are significant increase in the level of some enzymatic activities in both serum and urine in cases of bilharziasis of urinary bladder complicated by malignany. The enzypes that show increased activity in sera are lactic acid dehydrogenose and Alkaline phosphatase. Serum transaminases do not show significant changes in all cases.

2--Enzyms that show increased activity in urine are urinary lactic acid dehydrogenase and Beta-glucuronidase. This occur in bilharziasis complicated by malignant transformation but not in simple bilharziasis of the bladder.

3- Urinary bilharziasis are bound to be secondery infected by many organisms. The most famous and persistent organism is Escherchia -coli (E - Coli). This organism occur in both simple bilharzial cystitis and cancer bladder. Other associated organisms may be present namely streptococcus foecalis and streptococcus haemolyticus. The association of these organisms were

found specifically in malignant cases .

4- Very significant reduction in T-Lymphocyte function in patients with malignant transformation. The mean of T-Lymphocyte rosettes 38.86% while the mean percentage of T-Lymphocyte rosette in simple bilharzial lesion was 49.33%. The mean percentage of T-Lymphocyte rosettes in normal control (65.46%).

The mean percentage of T-Lymphocyte rosettes in group of intestinal bilharziasis still show lower percentage than the normal control but higher percentage than cancer bladder (39.6%).

The following conclusion were made: The thymus-dependent or T-Lymphocyte function is generally suppressed in schistosomiasis. The suppression becomes more apparent in cases with malignant trans formation of the urinary bladder.

This was explained on the basis of the presence of serum blocking factors (antigen, antibody or antigene-antibody complex) or by the initiotion of a feed back suppressor mechanism through the stimulation of the suppressor T. cells.

It seems possible that the state of immunodeffecency and T-lymphocyte suppresion is a general factor but other specific local factors either biochemical, bacterial or mechanical must work to elicit malignant transformation which is the case in bilharziasis of the bladder but not fulfilled in the colon.