

"Summary and Conclusion"

Pyruvate are intermediate product of carbohydrate metabolism and are derived mainly from glycolytic reactions in the muscles and erythrocytes. As the liver is intimately concerned with intermediate carbohydrate metabolism. So we estimated intermediate carbohydrate metabolism (blood pyruvate) in apparently healthy subjects at different age groups and also on selected liver affection, to find the effect of various hepatic disorder on blood pyruvic acid levels in both fasting and post prandial.

The present study include 138 subjects, they were classified into the following groups:-

- A) Control group: include 80 apparently healthy individuals.
This group was subdivided into the following groups according to age:-
1. Children group: 16 individuals.
 2. Adolescent group: 23 individuals.
 3. Adult group: 41 individuals.
- B) The pathological cases: were subdivided into:-
- [1] Bilharzial group: 36 patients.

- 14 patients with simple bilharzial affection.
- 10 patients with bilharzial hepatomegally.
- 7 patients with bilharzial hepatosplenomegally.
- 5 patients with active bilharzial hepatic fibrosis.

[2] Other parasitic infestation group: 6 patients.

[3] Viral hepatitis group : 11 patients.

- 5 patients with acute viral hepatitis.
- 6 patients with chronic hepatitis.

[4] Liver malignancy group: 5 patients.

The following results were obtained:-

* In control group:

Increase in both fasting and post prandial blood pyruvic acid levels in children group of normal control as compared to adolescent and adult groups, this increase was significant only in post prandial level. In all control groups, the post prandial level is higher than the fasting level.

* In patholgical cases:

- In simple bilharzial patients, the fasting and post

prandial blood pyruvic acid levels showed insignificant change as compared to control.

- In bilharzial hepatomegally, bilharzial hepatosplenomegally and bilharzial hepatic fibrosis, both fasting and post prandial blood pyruvic acid levels were significantly increased as compared to those of control.
- In other parasitic infestation, the fasting and post prandial blood pyruvic acid levels were increased as compared to those of control but this increase were significant only in the fasting level.
- In acute hepatitis, the fasting blood pyruvic acid level showed significant increase, while the post prandial level showed insignificant decrease as compared to control.
- In chronic hepatitis, both fasting and post prandial levels were significantly increased as compared to that of control.
- In liver malignancy, both fasting and post prandial blood pyruvic acid levels were significantly increased as compared to those of control.

In patients with different stages of bilharziasis there were a progressive increase in both fasting and post prandial blood pyruvic acid levels according to the severity of bilharz-
ial stage.

In patients with viral hepatitis, there were increase in both fasting values of acute and chronic hepatitis, also post prandial values for chronic cases were increased while the values of acute were decreased.

In all hepatic affection, there were a progressive increase in both fasting and post prandial blood pyruvic acid levels according to the severity of hepatic affection except in acute hepatitis where there was insignificant decrease in post prandial level only.
