

Ministry of Higher Education  
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# ***Study of Biochemical and Physiological changes in patients with Viral Hepatitis type A,B,C,E in Al-Muthana province***

**A thesis**

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***in a partial Fulfillment of the Requirements for the Degree of  
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## Summary

This study has dealt with the impact of viral infection on some biochemical and physiological parameters in patients with viral hepatitis type A,B,C,E in Al-Muthana Province. The study included 75 patients infected with viral hepatitis who visited Samawa Public Health Laboratory from the period of November 2012- March 2013 in addition to 25 healthy peoples as a control group whose ages ranged from (1-55) years. .

Patients infected with the viral hepatitis were divided into four types according to the viral infection . The study has concluded that the percentage of patients infected with viral hepatitis type A was the highest at 50.7%, which amounted the numbers to 38 out of 75 samples which were all in children ranging from (1-15) years . This is followed by viral hepatitis type B,C,E for patients who were 18.7% ,17.3% and 13.3% in percentages respectively, which amounted the numbers to 14,13,10 respectively. All infections were of types B,C,E in adults ranging from (15-55) years.

The study concluded on the following findings:

There has been a significant rise ( $p < 0.05$ ) in the rate of concentration of Total Serum Bilirubin(TSB) and the concentration of enzyme Alkaline Phosphate (ALP) and the concentration of enzyme Glutamic Pyruvate Transaminase (GPT) and the concentration of enzyme Glutamic Oxaloacetate Transaminase (GOT) in all patients infected with viral hepatitis compared with the control groups. The three types of infection in adults have shown significant differences ( $p < 0.05$ ) in the rate of concentration of the above biochemical variables when compared with another one.

There has been a significant decrease ( $p < 0.05$ ) in the rate of total numbers of White Blood Cells (W.B.C) , platelets (PLC) and the concentration of hemoglobin (Hb) in all patients infected with viral hepatitis compared with control groups. The three types of infection in adults have not shown significant differences in the rate of the above physiological variables when compared with another one.

There has been a significant decrease ( $p < 0.05$ ) in Growth hormones level and no showed significant varied in Testosterone, Estradiol hormones level in all patients infected with viral hepatitis compared with the control groups. The three types of infection in adults have not shown significant differences in the rate of concentration of the above hormonal variables when compared with another one.