



## Bacteriological and Immunological profiles for Patients with Viral Hepatitis in Babylon Province-Iraq

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**Abstract : Aims:** A cross-sectional study was conducted to investigate the bacterial profile as well as to assess some immunological markers in patients with HBV and HCV infections.

**Methods:** The study Included (70) patients with viral hepatitis with age ranged between (14-61) years old from both sexes (37 males and 33 females) with in a period of November 2015 to March2016. Blood and urine samples were collected from each subjects who were inpatient in Merjan Teaching Hospital in Babylon province. Twenty apparently healthy subjects were involved in this work as control. All specimens (blood and urine) were subjected to identify the aerobic bacterial types associated with viral hepatitis by biochemical and serological tests. Complement components (C3 and C4) and interferon  $\gamma$  were estimated as immune markers by ELISA technique.

**Results:** The results showed that (28.57%) of blood specimens and (62.8%) of urine specimens were positive for bacterial growth of both Gram-positive and Gram-negative. No significant differences ( $p < 0.05$ ) were estimated between hepatitis patients and control for all immune markers.

**Conclusion:** Bacterial infections were detected in viral hepatitis patients as a result of a state of immunosuppressive state.

**Key Words :** Bacterial Infection, Hepatitis, IFN- $\gamma$ , Complement component (C3, C4).