

## Prevalence of Hepatitis B Virus Genotypes With HBsAg Positive Patients Referred to Hospitals in Sari - Iran During 2010-2011

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**Background & Objectives:** HBV infection is a major global health problem and eight genotypes (A to H) and multiples subtypes of HBV have been identified, and they show some distinct geographic distributions. The available data on HBV genotype in Iran are very heterogeneous and limited. Therefore in this study, we tried to identify the HBV genotypes by using polymerase chain reaction (PCR).

**Methods:** In this cross-sectional study, HBV- positive serum samples of 100 patients with chronic hepatitis from 2010 to 2011 were studied. HBV-DNA was extracted from plasma samples using Mini Elute Kit from Qiagen. Plasma samples from HBsAg positive were confirmed the presence of HBV nucleic acid and determined the genotypes of HBV genome by PCR using the Master Mix kit with Taq-DNA polymerase enzyme and with type of specific primers. All samples were examined in the virology laboratory of Sari Medical School.

**Results:** The mean age of patients were 45+/- 25 (range, 20 to 70) year that 58 (58%) patients were male and 42 (42%) were female. The majority of HBV positive patients had a major surgery (44% patients) and then 32% patients had a family of hepatitis B virus infected. In this study, 67% had genotype D, 7% genotype B, 26% genotype D&B and 3% genotype D&B&C.

**Conclusion:** This study indicates that the genotype D is the most frequent followed by the genotype D&B in our region. Prevalence and incidence of HBV genotypes are with distributed among of areas and different genotypes may show different responses with antiviral therapy.

**Keywords:** Hepatitis B Virus; Genotype; HBV; PCR