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Investigation and Prevalence of Hepatitis C Virus Genotypes in Pregnant Women

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ABSTRACT Hepatitis C virus (HCV) causes severe liver infection and is spread through blood transmission from infected person to healthy individuals. HCV is more common in less developed countries due to poor hygienic conditions. This condition can be worse in pregnant women, where HCV can infect the fetus and may lead to chronic infections and may cause cirrhosis and carcinoma. Therefore, the purpose of this research was to study the distribution and prevalence of HCV in pregnant women in the Pakistani population, where such data are unavailable. Blood from 72 HCV-positive pregnant women was collected, RNA was extracted and nested PCR was performed for genotyping using genotype-specific primers. The most frequent genotype was found to be 3a (79%), followed by 3b (4%), 1a (4%), 1b (2%) and mixed genotypes (2%). The severity of HCV, reaction to therapy, and prognosis depend on several factors and one of the most important factors is genotype. Hence, this study will pave the way for the adoption of efficient therapeutic models to control HCV in high-risk populations.