

Prevalence of lamivudine drug resistance among hepatitis B virus untreated patients

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Background: Hepatitis B virus (HBV) represents a global health challenge due to its worldwide distribution and serious complications. Mutations of HBV polymerase, especially occurring at the highly conserved YMDD region, are related to resistance to lamivudine. Although these mutations are frequently secondary to lamivudine use, they can also occur naturally.

Aim: The aim of this study is to determine the prevalence of genotypic resistance to lamivudine in HBV isolates obtained from untreated HBV-infected individuals.

Methods: Quantitative real-time PCR assay was carried out on One hundred and fifteen clinical specimens of chronic

carriers. The specimens were extracted and amplified using INNO-LiPA HBV Drug Resistance primers and run on a 2% agarose gel, YMDD variants were analyzed by the HBV Drug Resistance Line Probe assay (Inno-LiPA HBV-DR).

Results: YMDD variants were detected in 40 (70.1%) of the 57 inactive HBV carriers. The YIDD mutant was presented in all cases (40 cases), either alone or associated with YVDD or V80+I80.

Conclusion: HBV genotypic resistance to lamivudine in untreated HBV-infected is common.

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