

PP-115 Antiviral drug response among patients of Hepatitis-B co-infected with Hepatitis-D virus

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Background: Since Hepatitis-B patients coinfecting/superinfected with Hepatitis-D virus are increasing in South-East Asian countries like Pakistan and India, so the study was designed to observe the effects of antiviral drugs like lamivudine on sero-conversion of HBeAg positive cases.

Methods: This study was conducted at Hepatology clinic, Lahore Pakistan, over a period of 2 years from 2007 to 2009. A total of 97 ELISA confirmed Hepatitis-B positive patients with deranged liver functions for 6 months were recruited. All were screened for HBeAg, HBV-DNA and anti-HDV using ELISA test. They were subdivided in 2 groups. Group A included patients who were HBeAg and HBV-DNA positive but Anti-HDV negative, while group B comprised of patients positive for HBeAg, HBV-DNA and Anti-HDV (all positive). Reverse transcriptase inhibitor (RTI), lamivudine in a dose of 100mg/day was given to all till sero-conversion.

Results: Out of total 97 patients 64% (n=62) were males, mean age 56±4 years. 55 cases were in group A and 42 were in group B. At the beginning of study, mean HBeAg was 284±179 in group A and 137±151 in group B. Within a period of 6 months, ALT became normal in 70% patients (n=38) among group A, and 19% (n=8) among group B. Serum viral markers did not change much till 1 year of treatment and was significantly slower among group B. 34% (n=19) patients in group A and 12% (n=5) patients in group B sero-converted completely at the end of 2 years therapy.

Conclusions: Hepatitis-B patients co-infected with Hepatitis-D virus have a chance of seroconversion and still the effective therapy options are available to treat such scenario.

Effort should be maximized to catch the diagnosis earlier and start the therapy in an optimal mode so as to get enhanced benefits of antiviral drugs like lamivudine.

PP-116 Comparison of HBV DNA results detected by 5 HBV/HCV/HIV-1 blood screening kits

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Background: Public demand for higher standards of screening for infections agents in transfusion products has fueled the development and advancement of nucleic acid test technology. This report describes a comparison of the HBV NAT screening results by 1 foreign and 4 domestic HBV/HCV/HIV-1 NAT screening kits.

Method: 1 foreign and 4 domestic HBV/HCV/HIV-1 NAT screening kits were applied to detect 393 plasma samples from chronic hepatitis B patients and healthy people and an additional plasma for sensitivity. These results were compared with the result of Roche COBAS TaqMan HBV Test

for quantitation of HBV DNA in serum. In addition, results of HBsAg by Architect and HBV DNA by screening kits were also compared.

Results: 325 positive results and 69 negative results were found in 394 samples by reagent II. 216–311 positive results were found in the 325 positive samples and 38–69 negative results were detected in the 69 negative samples by 5 screening kits; The lowest concentration of HBV DNA by the foreign NAT kit and A/B/C domestic kit were 6 IU/mL and 50 IU/mL, respectively. The domestic kit D had false-positive results. In addition, 285 positive results and 109 negative results of HBsAg were detected in 394 samples by Architect HBsAg. 212–282 positive results for HBV DNA were found in the 285 positive samples for HBsAg and 49–105 negative results for HBV DNA were found in 109 negative samples for HBsAg by 5 screening kits. Most of the different results came from the sera with HBV DNA concentration lower than 100 IU/mL.

Conclusions: Domestic reagents of HBV/HCV/HIV-1 for HBV DNA have lower sensitivity than foreign reagent. Further studies shall be concentrated on the accuracy of both foreign and domestic NAT reagents.

PP-117 General practitioners and hepatitis B: a survey to determine current level of awareness and treatment capabilities of chronic hepatitis B

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Background and Objectives: In order to play the role of general practitioners in prevention and treatment of chronic hepatitis B better, we investigated the current level of the awareness and treatment capabilities of chronic hepatitis B among the general practitioners.

Methods: A written examination survey was conducted to 102 general practitioners in a district of Beijing. They came from 40 regional community health service centers, 2 or 3 doctors per center.

Results: The survey revealed that 58.8% of general practitioners knew the basic diagnostic points, and 91.2% were aware of the control of disease prevention. Whereas, only 56.8% of the surveyed doctors were aware of the severity of the disease and could make a correct assessment of prognosis of the disease. Only 27.5% had the antiviral therapy concept. Only 19.6% knew the common side effects of interferon, and 6.9% knew the types of antiviral drugs and were sure of which agent to use.

Conclusion: To facilitate the hepatitis B patients to be better managed in both of the specialty hospitals and the community, improving the level of the awareness and practice of chronic hepatitis B management in general practitioner community seems warranted and professional knowledge training is necessary.

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PP-118 Effect of hepatitis B virus X protein on function of natural killer cell in NK-92 cells

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Background: Many viruses have evolved strategies to modulate the activity of NK cells in response to the selective pressure exerted by NK cells, such as envelope protein E2 of HCV, UL16 of HCMV, et al. Whether Hepatitis B virus can produce any protein that can modulate the activity of NK cells is not clear. Here in the present research, we