

Viral Coinfections

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Keywords: Hepatitis C; HIV; Liver; Carcinoma

Coinfection HBV/HCV

The hepatitis C virus belongs to the family Flaviviridae. It is estimated that 130 million people are infected with HCV worldwide and that cases of co-infections HBV / HCV concern 7-20000000 people. These two viruses share the same liver tropism. The case of co-infections is associated with increasing severity of liver disease, faster development to stages of fibrosis, cirrhosis and HCC than in the case of mono-infection whether HBV or HCV [1]. Studies conducted in vitro have shown that HCV played a dominant negative effect which inhibit HBV replication and which is mediated by the HCV Core protein [2,3]. A second study, meanwhile, found the opposite effect, suggesting that HBV inhibit replication of HCV [4]. However, or interactions between HBV and HCV are still very difficult to study and this mainly because of lack of appropriate studies in vitro systems. BELLECAVE team was able to demonstrate that these two viruses could replicate in the same cell without bias interact directly. Viral interference would be indirect and mediated by molecular mechanisms that might be responsible for these mutual inhibitions observed [5-8]. HCV is capable of inducing an

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at key positions Y100C, P120T, sK122R, sD144A. In two studies are reported sK122R mutations and involve genotypes A, substitutions extremely rare in this genotype. The absence of antibody at the time of reactivation was not possible to perform functional analysis of the recognition of HBsAg and anti-HBs antibodies of patients. One can imagine that the appearance of mutation is the result of immune selection pressure on the virus. But that reactivation of HBV was made possible by the absence of anti-HBs antibodies. The reactivation of occult infections in HIV patient's phenomena (+). Another study showed that reactivation of occult infection in two HIV (+) patients was independent of resistance mutations to lamivudine and state of immunosuppression [18].

References

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Clinical and virological profiles in patients with multiple hepatitis virus infections.
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