Hepatitis C and hepatocarcinoma: Response and treatment

Ahmed A. Abd-Rabou
National Research Centre, Egypt

Background: Liver disease is a general term for any damage that reduces the functioning of the liver. The prevalence of hepatitis C virus (HCV) infection varies across the world, with the highest number reported in Egypt. HCV infects liver and may lead to hepatocellular carcinoma (HCC).

Objectives: The assessment of new strategies for response and treatment of HCV and HCC is the broad objective of this work.

Material & Methods: Quantification of HCV-RNA by qRT-PCR was performed for every patient. Gene polymorphisms of Bcl-2 (Ala43Thr) using PCR-RFLP and GH levels using ELISA were tested. On the other hand, infected Huh-7 cells were transfected with the SiRNAs targeting the viral genome.

Results: HCV patients have high significant differences of Bcl-2 43Thr genotype and GH levels when comparing non-responders with responders. There were high significant differences, in the levels of cell density, γ-IFN, CD4, and CD8, when comparing control cultured cells with curcumin and taurine treated cultured cells.

Conclusions: We concluded that Bcl-2 gene and GH levels can be used as sensitive biomarkers for HCV response to IFN therapy and suggested that curcumin and taurine can be used in combination with standard therapeutic lines for hepatoma treatment.

aabdrabou@zewailcity.edu.eg