



Adhesion Molecules in Egyptian Hemodialysis Patients:Relation to HCV and TTV Co-infections

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Abstract

Background: Hemodialysis (HD) patients suffer from atherosclerotic complications in which endothelial dysfunction (ED) mediated by the activation of adhesion molecules (AdMs) plays an important role. TTV is prevalent in HD patients, yet its clinical significance remains unclear.

Objective: to study the impact of TTV coinfection on ED in chronic HCV-HD patients.

Patients and Methods: 72 HD patients and 10 normal control were tested for HCV-RNA, TTV-DNA, Mac-1, sICAM-1 and sVCAM-1.

Results: (1) TTV viremia was detected in 39% of HD patients. (2) AdMs were significantly higher in HCV-monoinfection compared to TTV-monoinfection, (Mac-1, $p=0.03$), (sICAM-1, $p=0.001$), and (sVCAM-1, $p=0.001$). (3) AdMs in HCV/TTV co-infection were significantly higher compared to TTV-monoinfection but not to HCV-monoinfection. (4) HCV infection was determined as an independent determinant of sICAM-1, sVCAM-1, and Mac-1.

Conclusion: AdMs elevation in HD patients is related to HCV infection and not to TTV infection.