OMICS Group Conferences
Accelerating Scientific Discovery
3rd World Congress on Virology
November 20-22, 2013 DoubleTree by Hilton Baltimore-BWI Airport, USA

The effect of Co-infection with Hepatitis B (HBV) and Hepatitis C (HCV) on the prevalence of proteinuria and loss of renal function

Bahaa El din Zayed
Cairo University, Egypt

Abstract

Background and objectives:

Patients infected with HBV & HCV are at increased risk for renal disease. This study assesses factors associated with proteinuria & doubling of creatinine among patients singly & coinfected with these viruses.

Patients and methods:

The study was performed on 1243 patients. All subjects with either HCV or HBV diagnosed through our hospital blood bank during period from May 2009 to April 2011 were included. Clinical characteristics were gathered at baseline and at last follow up. Characteristics for patients (HBV & HCV alone and co-infected) were compared using either chi-square or Students T-test. Logistic regression assessed the association between clinical variables and the presence of proteinuria or doubling of creatinine among the cohort overall and among subgroups defined by HBV or HCV infection.

Results: 23.6% of 1243 patients with urine analyses had proteinuria (25.6% co-infected, 10.6% HBV-infected, & 63.8% HCV infected). Among all patients, co-infection, decreasing albumin and the use of anti-hypertensive or diabetic medications were associated with an increase of proteinuria. Among patients with HBV, concurrent infection with HCV, and increasing HCV RNA level were associated with an increased risk of proteinuria. Among patients infected with HBV (with or without HCV), proteinuria was associated with increasing risk of doubling of creatinine. Among patients infected with HCV (with or without HBV), increasing HCV RNA and the use of anti-hypertensive medications was associated with an increased risk of doubling of creatinine.

Conclusion:

The patient coinfected with HBV & HCV is at greater risk for clinically significant proteinuria and loss of renal function. Progressive loss of renal function is associated with markers of viral activity such as proteinuria among HBV infected patients and HCV RNA levels among HCV infected patients.

bahaazayed@hotmail.com