Seroprevalence of Hepatitis B, C and associated risk factors in hemodialysis units in Baghdad

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Background: Viral hepatitis B & C (HBV&HCV) remains a major hazard for both patients and medical staff of hemodialysis units.

Objectives: To estimate the prevalence rate of HBV&HCV infection in hemodialysis centers in Baghdad and to identify the possible risk factors which may contribute in the risk of infection spread among these vulnerable patients.

Patients & Method: This is a cross-sectional study conducted in Baghdad for the period from 30 June through October 2015, among all patients attending the five main hemodialysis centers in Baghdad during study period. A questionnaire-form had been developed and tailored by the researchers. Data collected regarding patient's age, gender, duration of dialysis, number of sessions per week, frequency, history of blood transfusion, renal transplant, surgical intervention, in addition of reviewing patient's medical records to confirm the laboratory results of HBV&HCV screening.

Results: A total of 651 hemodialysis patients were enrolled with an overall rate of HBV infection was 7.8%, and the overall rate of HCV infection was 30.87%. The highest rates of infection was reported for HBV15.1 % in Al-Yarmouk teaching hospital, in patients aged over 70 years old, those attending multicenter 18%, length of time on hemodialysis and seropositivity of 24-36 months, history of surgical intervention19.7%, History of previous renal transplant 23.7%, blood transfusion 25.3% while frequency of transfusion history, age, immunization had no role in seroconversion rate of HBV infection. While the highest prevalence rate of HCV infection was found in Al-Kadhmiya teaching hospital 37.5%, in patients aged between (40-49) years old, males 35.8%, those attending multicenter 84.9%, length of time on hemodialysis and seropositivity of more than 36 months, history of surgical intervention 83.6%,History of previous renal transplant 81.6%, blood transfusion 78.7% while frequency of transfusion history, had no role in seroconversion rate of HCV infection. Hemodialysis patients with history of diabetes and hypertension were more prone to HBV&HCV infection.

Conclusion: The prevalence of HBV&HCV is very high in hemodialysis patients compared to general population indicating a causative relation between hemodialysis and virus transmission that needs an extreme careful observation of preventive infection control measurements is essential to limit its transmission in hemodialysis units.

Biography
Baydaa Hameed Al_Abdali is working as an Assist. Professor in the College of Pharmacy/Al-Mustansiriya University/Iraq, Baghdad, Baydaa Hameed is currently researching on Viral hepatitis B & C (HBV&HCV) remains a major hazard for both patients and medical staff of hemodialysis units.

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