

## Viral hepatitis infections among paediatric dialysis patients

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**Background:** Hepatitis c virus (HCV) and hepatitis B virus (HBV) are the most common causes of liver disease in patients with end stage kidney disease, they are more prevalent in haemodialysis patients (HD) than general population but the exact route of transmission are not clear. Based on the clinical and epidemiologic profiles, hepatitis G virus (HGV) and transfusion transmitted virus (TTV) could be acquired mainly by parental transmission. We therefore investigated the presence of these viruses and its relation to each other in HD paediatrics patients at the paediatrics HD unit of Cairo university hospital.

**Patients and Methods:** The seroprevalence of HGV and HCV were detected by reverse transcription and polymerase chain reaction (RT-PCR), TTV was detected by PCR, 60 serum samples from pediatric patients with chronic renal failure were analyzed.

**Results:** HCV-RNA was detected in 22%, HGV in 6% and TTV in 30%. 17 of the 26 HCV-RNA infected samples were coinfecting with other viruses, 12 (70%) with TTV, 2 (12%) with HGV and 3 (18%) with HBV. The seroprevalence of HCV, and HBV viruses were found to be statistically significant when compared to that of healthy controls, while that seroprevalence of HGV and TTV were insignificant. Also there was no difference in ALT levels between exclusive HGV and TTV positive and negative patients, however ALT was significantly out of range in HBV and HCV positive patients compared to HBV and HCV negative patients.

**Conclusion:** we conclude that abnormal liver enzymes were uncommon in HD patients infected with TTV and HGV alone, they only reflect a post parental exposure to blood and blood contaminated product in HD patients. It is suggested that they are considered innocent bystander.

**Keyword:** Viral hepatitis, paediatric dialysis patients, hepatitis G virus (HGV) and transfusion transmitted virus (TTV).