Existence of Occult Hepatitis C virus Infection in Local Haemodialysis Setting

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**Introduction:** Among chronic hepatitis C patients, the viral agent is well known to replicate in the hepatocytes and extrahepatic cells. Previous studies have demonstrated a new form of hepatitis C called 'Occult HCV Infection' (OCI). It is defined as the presence of HCV RNA in the hepatocytes but undetectable HCV RNA in the serum or plasma. The exact natural history, epidemiology, pathogenesis and clinical importance of OCI are unknown. Several studies have been carried out worldwide, but none from Malaysia. This study investigated OCI among local patients undergoing routine hemodialysis at a referral hospital in Pahang, Malaysia.

**Materials and Methods:** Blood was collected from both anti-HCV positive (n=10) and anti-HCV negative (n=18) patients. Inclusion criteria for the seronegative patients included elevated liver enzymes. **Results:** 10 chronic hepatitis C patients were recruited in this study. All had viral RNA detected in both serum and peripheral blood mononuclear cells (PBMC). Viral quasispecies was common in this group of patients. Meanwhile, out of 18 seronegative patients, 3 patients (16%) showed active viral replication in PBMC. **Conclusion:** This study proved the existence of OCI in local haemodialysis setting. Further investigation is needed to get the actual prevalence of OCI.