

**Abstract****The frequency of anti-Hepatitis C Virus (anti-HCV)  
and distribution of HCV subtype in Patients with Hemodialysis  
in Private General Hospital Surabaya**

The prevalence of HCV infection was high in patients with hemodialysis in the General Hospital Dr. Soetomo Surabaya, but its prevalence of the Private General Hospital in Surabaya has not been determined. The aim of this study was to determine the frequency anti-HCV positive and HCV subtype distribution in patients with hemodialysis in a Private General Hospital in Surabaya.

Previously, HCV subtypes 1a and 1b were predominant in patients with hemodialysis in the General Hospital Dr. Soetomo Surabaya (Soetjipto et al., 1996).

Plasma specimens were obtained from 41 patients with hemodialysis in a Private General Hospital in Surabaya. Anti-HCV test was performed by enzyme-linked immunosorbent assay (ELISA). HCV RNA was extracted from plasma specimens with anti-HCV positive. The cDNA synthesis and cDNA amplification were performed by one-step RT-PCR and the PCR products were sequenced using the ABI Prism 310 Genetic Analyzer (Applied Biosystems). Phylogenetic tree was reconstructed using Genetyx for Windows Version 9.0.

Among 41 plasma specimens obtained, 25 (60.8%) showed anti-HCV positive. Nineteen (76%) of 25 patients with anti-HCV positive demonstrated positive HCV RNA, which consisted of 10 (52,64%) subtype 1a, 3 (15,79%), each for subtype 1b and 1c, one (5,26%) each for subtype 2a and 3k, and 1 (5,26%) for HCV genotype 1. This study showed that the prevalence of HCV in hemodialysis patients in this private hospital was not much different from those in general hospital. HCV subtype 1a was predominant, as those found in previous studies in Indonesia.

***Key words: anti-HCV, subtypes, hepatitis C virus, hemodialysis, Surabaya***