Artee, Himani Kukreti, J Antivir Antiretrovir 2011, 3:4
doi: http://dx.doi.org/10.4172/1948-5964.S1.16

OMICS Group Conferences
Accelerating Scientific Discovery

International Conference and Exhibition on
VIROLOGY
5-7 September 2011 Baltimore, USA

# Selective dominance of HCV genotype-1 in Indian patients co-infected with Human Immunodeficiency virus

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Hepatitis C virus (HCV) co-infection with human immunodeficiency virus (HIV) is assuming greater significance in recent years across the globe. Genotyping of HCV is important to augment appropriate antiviral therapy during HCV/HIV co-infection. Present study was therefore, intended to determine the dominant genotype(*s*) of HCV in HCV/HIV co-infected cases belonging to the metropolitan city of Delhi which is one of the most thickly populated places with diverse communities in the Asian sub-continent.

Thirty-six cases of HCV (20 HCV/HIV co-infected and 16 HCV mono-infected) were included in the study. HCV RNA extraction, cDNA synthesis, amplification of the 5'UTR followed by nucleotide sequence determination and phylogenetic analysis was carried out.

Results revealed exclusive dominance of HCV *genotype 1* in HCV/HIV *co-infected* cases while *genotype 3* in HCV *mono-infected* cases.

Comparative review of our findings with other scanty reports from rest of the world suggests dominant co-existence of HCV-genotype-1 both with Afro-Asian (subtype C) and Euro-American subtypes (A/B) of HIV-1. Prognosis is worse in HCV genotype 1 patients co-infected with HIV. This is especially relevant in countries like India where a large population is infected with HCV/HIV co-infection and HCV genotype 1 is prevalent. The HCV genotype 1 has been reported to be associated more often with a rapid progression to AIDS and death than other genotypes. HIV co-infected patients with HCV genotype 1 had more liver related deaths than patients co-infected with other genotype. These facts indicate that HCV/HIV co-infection appears to have some link or relation with HCV genotype 1.