

## Molecular differentiation of dengue virus serotypes using RT-PCR and estimation of their effect on liver function

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Dengue is one of the common and leading causes of mortality and morbidity in tropical countries especially in India. Its hepatotoxic effects have been demonstrated by researchers over a long time. Dengue virus is a RNA virus and known to have four serotypes and recently a fifth variant is also demonstrated in India. The effect of the different serotypes is seldomly investigated by the researchers. So we try to estimate the effect on Liver due to infection via different serotypes of Dengue virus. After taking the ethical clearance, from the ethical committee, a hospital based prospective study was conducted from August 2017 to November 2018, on patients attending OPD and IPD, of Medicine Department at Shri Mahant Indresh Hospital Dehradun. 60 Dengue Positive cases were selected. RNA gets extracted using Reverse Transcriptase PCR, Conventional PCR and Real Time PCR techniques and further visualized using Agarose gel electrophoresis techniques at the CMRL (Central Molecular Research Laboratory) and liver

Enzymes SGPT, SGOT, ALP, GGT were analyzed at Central Clinical Laboratory of SMI Hospital using the vitros 5600 fully autoanalyzer of the Orthoclinical diagnostics. Results were analyzed using Microsoft Excel tools. DENV-3 found to be most hepatotoxic.

### Biography

Abhinav Manish is Consultant in [Biochemistry](#) at [Soban Singh Jeena Government Institute of Medical & Health Sciences](#). He was Awarded MBBS from Government Medical College Srinagar Pauri Garhwal in 2016 and his MD in Biochemistry from [SGRR Institute of Health and Medical Sciences](#) as a Government Sponsored candidate in 2020. He is a very young and Energetic Faculty in Biochemistry. He is a Published author and Verified Reviewer.