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 cause of mortality and morbidity in tropical countries specially 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 seldomely 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 Indiresh 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 autoanlyzer of the Orthoclinical diagnostics. Results were analyzed using Microsoft Excel tools. DENV-3 found to be most hepatotoxic.

Recent Publications (minimum 5)

- **Evaluation of Iron Profile, Vitamin B12 and Folic acid levels in Pregnant and Non-pregnant Women in a Tertiary Care Hospital. Abhinav Manish*, Pratibha Pandey, Nita Garg and Sanjiv Kumar Bansal Published in *Indian J Health Sci and Care* 2019;6(1):6-8.**
- **Molecular Characterization of dengue and chikungunya viruses and their Association with liver Profile. Abhinav Manish*, Tariq Masood, Amit Verma, Narotam Sharma ,Rajeev Singh Kushwaha. Published in *International Journal Of Clinical Biochemistry and Research* volume 7(1) march 2020.**
- **Novel severe acute respiratory syndrome corona virus. A review of current status and strategies in India. Manish A* , Pandey P , Garg N , Masood T. Published in *Int J Clin Biochem Res* 2020;7(4):416-425. (An Invited Review)**
- **Acute Myeloid Leukemia: Review and Current Update. Abhinav Manish* and Amit Badola. Published in International Journal of Biochemistry and Physiology 2021;volume 6(2):000197. (An Invited Review)**
- **Acute Renal Failure in Scrub Typhus patients. Abhinav Manish*, Pratibha Pandey, Shruti Malhotra. *Int J Clin Biochem Res* 2022;volume 9(1):28-30.**



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Notes/Comments:

1. If Online mode is also available for oral presentation, then please do let inform for the same.