Seroprevalence of Herpes Simplex Virus and Rubella Confection in Tropical Regions in Bihar, India

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Abstract : Viral co-infection is now very common across taxa and environments that are involved in congenital infections. Herpes simplex virus (HSV) and Rubella are the two serious viral infections, well categorized in TORCH Syndrome. Here we had endeavoured the seroprevalence of co-infection of HSV and Rubella. Systematic tests have been performed to check the virulence pattern of the co-infection. The study was conducted at Department of Virology, Rajendra Memorial Research Institute of Medical Sciences (ICMR), Patna, Bihar, India during January 2018-July 2018. 299 newly cases were attended with the sign and symptoms of HSV and Rubella. After taking written consent forms from all the subjects, blood samples were collected for serological detection. ELISA was performed to detect the presence of IgM antibody level. 12 patients were found to be IgM positive from each HSV and Rubella infection. The findings of our study showed that 6 patients were positive for both HSV and rubella and hence were co-infected. Such co-infection causes severe health problems as it leads to the mortality rate of the patients during viral infectivity. Epidemiologically, proper screening should be needed to check any chance of occurrence of such co-infection in the affected regions in large scale and take suitable preventive approach to decrease the case totality. Concern has to be given to aid proper diagnosis and treatment in order to decrease the spread of HSV and Rubella co-infection.

Keywords: HSV, Rubella, seroprevalence, co-infection, ELISA, viral infectivity **Conference Title:** ICID 2019: International Conference on Infectious Diseases

Conference Location : Sydney, Australia **Conference Dates :** January 30-31, 2019