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Seroprevalence of Common Viral Diseases: A Hospital Based Study from Amritsar, India

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Abstract

Introduction: There is a paucity of published data on epidemiology of the viral infections in Punjab, India. The Viral Research and Diagnostic Laboratory (VRDL) located at Government Medical College (GMC), Amritsar conducts the initial diagnosis of common viruses circulating in the region.

Aim: To report the seroprevalence of various viral diseases in Amritsar and neighboring districts of Punjab along with the demographic and geographical data of the patients.

Materials and Methods: Whole blood sera samples from a total of 5781 patients suspected of various viral diseases (chikungunya, dengue, hepatitis A, hepatitis B, hepatitis C, hepatitis E, herpes simplex-1 or herpes simplex-2) were received at VRDL, GMC, Amritsar from January 2015 to April 2016 and a cross sectional study was conducted. The diagnosis was based on serological assays.

Results: Out of total 5781 suspected cases, 1790 were diagnosed with antibodies for atleast one of the tested viral diseases. Dengue virus was the highest occurring viral disease (56.77%). Male patients infected with viruses outnumbered female cases, except for hepatitis E and herpes simplex-1. The 21-40 years age group appeared to be the most susceptible age group for nearly all studied viral infections. Among the total nine reported outbreak investigations, largest encompassed 1335 dengue cases from Amritsar district.

Conclusion: VRDL established in GMC, Amritsar has become instrumental in detection of emerging and re-emerging viral diseases including outbreak investigation of communicable diseases. Timely action with the help of adequate information and capacity to diagnose the viruses might help in saving numerous lives.

Keywords: Chikungunya, Dengue, Hepatitis, Herpes simplex, Viral research and diagnostic laboratory

Reference

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