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Molecular diagnosis of *Human metapneumovirus*

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The recent discovery of *Human metapneumovirus* (hMPV) as a major respiratory pathogen has been made possible by means of RT-PCR. Studies thus far published have mostly been conducted using the molecular approach. Clarification of epidemiological, clinical features and using molecular biological techniques for diagnosis of hMPV. I89 patients with suspected viral respiratory tract infections were included and respiratory specimens were analyzed for hMPV by seeplex respiratory virus detection kit. Detection techniques that were used included virus detection by RT-PCR, DFA-staining and the rapid culture technique known as shell vial amplification using Mabs of nasal wash or aspirate fluid. The study determined that 61 (32.3%) respiratory viruses out of 189 respiratory samples and showed presence of hMPV IN 8 (13.1%) of 61 samples and epidemiological data showed that hMPV had variable seasonal activity. Sex patients with positive hMPV (75%) had preexisting serious disorders. By using shell vial cultures with monoclonal antibodies (MAbs), the related isolated virus of of the patient with Non Hodgkine Lymphoma (NHL), showed a plaque of infected cells with small synctial formations, while that of other seven patients showed single infected cells. All samples with hMPV positive patients by RT-PCR were correlated with whatever DFA staining or shell vial cultures by MAbs. *Human metapneumovirus* is a signficant pathogen in immunocompromised patients with a risk of high morbidity and mortality. Using combination of diagnostic work up may be useful to confirm detection of hMPV.

Biography

Essam Badawy has completed his PhD from Minia University, Egypt and Postdoctoral studies from Cairo University School of Medicine. He is the Director of Emergency Department, Hera General Hospital, JCI-Accredited governmental hospital, MOH, KSA. He is Senior Consultant Internal Medicine and Professor of Internal Medicine and Immunology, Faculty of Medicine, Minia University. He has published more than 24 papers in reputed journals and has been serving as an Editorial Board Member of repute.

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