Dual infection by influenza viruses and human rhinoviruses in patients with acute respiratory infection in Ahvaz by 2012-2013

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Background: Viruses are the major cause of acute respiratory tract infection (ARTI) and yet many suspected cases of infection remain uncharacterized. The association between ARI and dual infection by human influenza virus and Human rhinovirus (HRV) was investigated in patients with ARI who were admitted to the hospital during the 2012-2013 winter seasons in Ahvaz. The aim of this study was to determine co-infection by influenza virus and HRV in patients by using RT-PCR technique.

Methods: This study was a cross-sectional study. Nasopharyngeal swab specimens were prospectively obtained from 100 patients hospitalized in Ahvaz for ARI during a 1-year period. Samples were tested for Influenza-A and B viruses by using RT-PCR method, and then positive samples were tested for human rhinovirus.

Results: 13% (10 male and 3 female) of patients were positive for Influenza, 9 patients were Influenza-A and 4 patients were Influenza-B. From Influenza-A patients, 4 cases were H1N1, 2 cases were H3N2 and 3 cases belong to other subtypes. In addition, we found two co-infection by Influenza virus (H1N1 and type B) and HRV.

Conclusions: Dual viral infection is a relevant risk factor for the admission of patients with severe respiratory infection.

Biography
Amir Pouremamali has completed his MSc in Virology at the Jundi Shapur University of Medical Sciences in Iran in 2013. Currently he is working in the blood center.

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