

TITLE: ACUTE RESPIRATORY INFECTIONS CAUSED BY RHINOVIRUS AND INFLUENZA IN PRIMARY CARE UNIT OF GUARAPUAVA-PR

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ABSTRACT:

Acute respiratory infections (ARI) are the most common disease in all the world and associated with high morbidity and mortality. Its causing agents including viruses, bacteria and fungi, the latter less frequently, however, respiratory viruses are responsible for the vast majority of cases, and these can be emphasized the human rhinovirus (HRV), the Influenza virus and the respiratory syncytial virus (RSV). Thus, this study aimed to investigate the frequency of such respiratory viruses during the period from 2013 to 2015 in patients with ARI was conducted in a primary care health unit of Guarapuava-PR. We collected 135 and 144 samples of nasal secretions for detection of HRV, Influenza viruses, and RSV. Samples were tested for the presence of such agents individually, by RT-PCR, standardized for each virus. About 20% (25/135) of the samples presented a positive result for the HRV, with the highest detection rate between May and August and in children up to 10 years of age. As for the Influenza virus, no cases of respiratory infection associated with Influenza A, which in this group presents the greatest variability and infectious potential, being responsible for annual epidemics and, less frequently, by pandemics, however, 3 samples were positive for Influenza B, less frequent pathogen and associated with sporadic cases of infection, this fact can be justified by the absence of outbreaks of Influenza A in the period studied. And still, for RSV, they were not detected cases of respiratory infection associated with the same in all samples, which may represent absence of the virus in the population in question or an insufficient number of samples. Thus, considering that this is the first epidemiological study to investigate the presence of such viruses in patients with respiratory infection in the Guarapuava, It is concluded that more studies are necessary in order to establish strategies for diagnosis and prevention of the disease.

Keywords: Acute respiratory infections, Human rhinovirus, Influenza virus, Respiratory syncytial virus

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