



Short report

Viral influenza-like illnesses: dynamic interrelationships during the 2015–2016 influenza season in hospitalized patients

B.A. Cunha ^{a, b, *}

^a Infectious Disease Division, Winthrop-University Hospital, Mineola, NY, USA

^b State University of New York, School of Medicine, Stony Brook, NY, USA

ARTICLE INFO

Article history:

Received 3 November 2016

Accepted 14 December 2016

Available online 23 December 2016

Keywords:

Human metapneumovirus

Respiratory syncytial virus

Human parainfluenza viruses

Rhinovirus

Enterovirus

Community-acquired viral pneumonia



CrossMark

SUMMARY

In hospitalized children and adults, the temporal relationship of viruses causing influenza-like illnesses (ILIs) and influenza has not been well described. During the 2015–2016 influenza season at our hospital, the dynamic interrelationships between ILI viruses (human metapneumovirus, respiratory syncytial virus, human parainfluenza viruses 3 and 4, rhinoviruses/enteroviruses, and coronaviruses) and influenza A were characterized in 768 hospitalized children and adults.

© 2017 The Healthcare Infection Society. Published by Elsevier Ltd. All rights reserved.

Introduction

It has been said that the only thing predictable about influenza is its unpredictability. Between influenza epidemics, seasonal influenza outbreaks typically occur during the late winter/early spring months. In addition, there are several respiratory viruses that present as influenza-like illnesses

(ILIs), including human metapneumovirus (hMPV), coronaviruses (COR), rhinoviruses/enteroviruses (R/E), human parainfluenza viruses (HPIV), and respiratory syncytial virus (RSV).^{1–6} The dynamic temporal relationships between ILI respiratory viruses and influenza in hospitalized children and adults have not been well characterized.^{6–10}

The seasonal peaks of individual ILI viruses are well known. Winter ILI viruses include HPIV and RSV; rhinoviruses are autumn/spring ILI viruses; and the enteroviruses are summer/autumn viruses. Until recently, precise diagnosis of ILI respiratory viruses was frequently not undertaken. However, with the availability of multiplex polymerase chain reaction (PCR)

* Address: Infectious Disease Division, Winthrop-University Hospital, 222 Station Plaza North (Suite #432), Mineola, NY 11501, USA. Tel.: +1 (516) 663 2505; fax: +1 (516) 663 2753.

E-mail address: bacunha@winthrop.org.

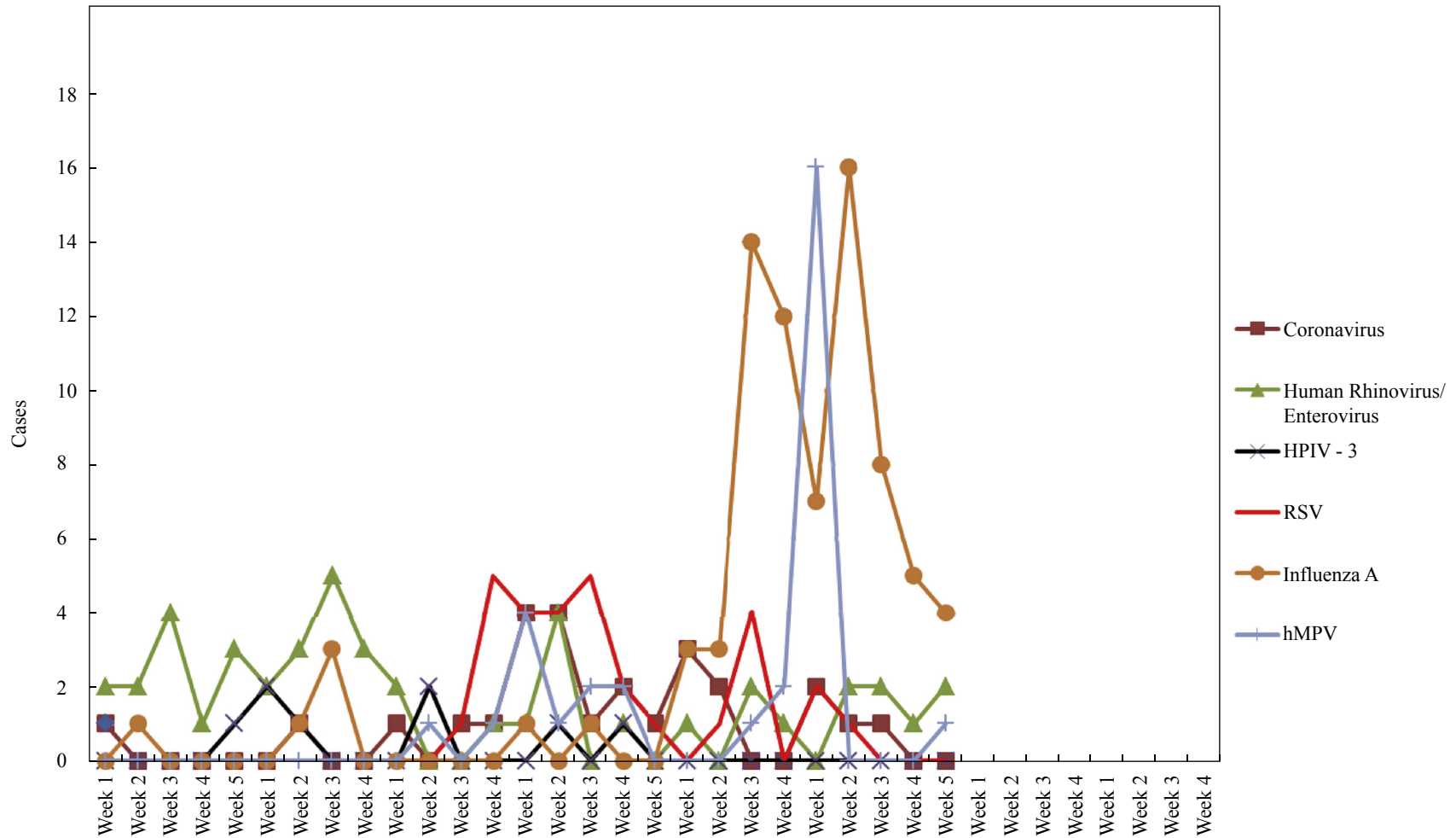


Figure 1. Viral influenza-like illness dynamics in hospitalized adults during the 2015–2016 influenza season, October to March. Weeks along the x-axis are numbered according to the week of each month. HPIV-3, human parainfluenza virus-3; RSV, respiratory syncytial virus; hMPV, human metapneumovirus.

Download English Version:

<https://daneshyari.com/en/article/5668290>

Download Persian Version:

<https://daneshyari.com/article/5668290>

[Daneshyari.com](https://daneshyari.com)