INTRODUCTION

Data comparing viral frequencies in hospitalized vs outpatients children with acute respiratory infection (ARI) are limited for Argentina.

OBJECTIVES

- To compare the frequency of classical respiratory viruses in hospitalized vs outpatient children with ARI before the Flu A H1N1, 2009 pandemic in Buenos Aires city.
- To determine the seasonality and clinical / epidemiological characteristics.
- To detect rhinoviruses (HRV) in outpatients.

RESULTS

Classical viruses were detected in 103/248 (52%) of hospitalized and 38/128 (30%) of outpatients. The most frequent were: RSV (34%) in hospitalized and Flu (A+B) (12%) in outpatients.

Most patients were enrolled during winter 2008 and fall 2009. Clinical features in positive patients for classical viruses were: bronchiolitis (62%), pneumonia (9%), and bronchitis (4%).

Median age was 7 months (hospitalized) and 18 months (outpatients).

Rhinovirus were detected in 32/128 (25%) outpatients. Co-infection with other viruses was not observed. Symptoms were: rhinitis (78%), cough (72%), fever (47%) and pharyngitis (41%).

19% (50/266) of patients >6 months had received the seasonal Flu vaccine.


CONCLUSIONS

- Viral distribution was different in both populations, probably due to the different median age.
- Among the classical viruses the most frequent were: RSV (34%) in hospitalized patients and Flu (A+B) (12%) in outpatients.
- HRV were detected in 25% of outpatients and not observed in co-infection with other viruses.
- The COPAN nasopharyngeal swabs (COPAN™) (outpatients) were tested for the classical viruses (RSV, adenovirus -AdV-, Flu A and B and parainfluenza -PIV-) by indirect immunofluorescence with monoclonal antibodies (Millipore/Chemicon). HRV were studied only in outpatients by one step RT-Real Time PCR, following the CDC protocol.

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