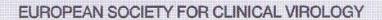
ABSTRACTS

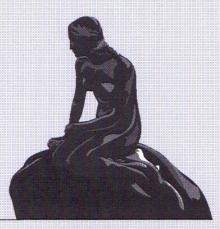
22nd Annual Meeting





COPENHAGEN 2019

11-14 September @ www.escv2019.com









[P006] RHINOVIRUSES IN HOSPITALIZED CHILDREN WITH ACUTE RESPIRATORY INFECTION, CROATIA 2017-2019

Suncanica Ljubin Sternak¹, Irena Ivkovic-Jurekovic², Maja Mijac³, Jasmina Vranes⁴

Aim: To determine the clinical characteristics and epidemiology of rhinovirus infection in hospitalized children with acute respiratory infection (ARI).

Method: A prospective study conducted form March 2017 to February 2019, included 427 children with ARI, admitted at Children's hospital Zagreb. Nasopharyngeal swabs were tested for respiratory viruses by multiplex PCR and cDNA synthesis in one—step reaction, followed by detection of PCR amplicons using microchip electrophoresis.

Results: There were 259 boys and 168 girls. According to the age, the following groups were defined: 0-12 months (n=129), 13-36 months (n=117), 37-60 months (n=51), and >60 months (n=130) of age. According to the localization of infection, patients were categorized as those presented with upper respiratory tract infection (n=221), and those with lower respiratory tract infection (LRTI) (n=206). The viral etiology was proved in 74.9 % of the patients. The most commonly detected respiratory virus was rhinovirus, diagnosed in 40.5% of all patients; 63.6% as monoinfection, and 36.4% as codetection with other respiratory viruses. Fifty-one percent of children with rhinovirus monoinfection presented with LRTI. There were no statistically difference in rhinovirus prevalence according to the gender, age, and localization of infection (P > 0.05). Peak incidence of rhinoviruses was registered in spring and autumn months.

Conclusions: Rhinoviruses were the most prevalent respiratory viruses in this study causing significant proportion of LRTIs. These results highlight its role in etiopathogenesis of LRTI in children of all ages.

Acknowledgements: This study was supported by the Croatian Science Foundation, Project No 7556 to S. LJ. S.

¹Teaching Institute of Public Health "Dr Andrija Stampar", School of Medicine University of Zagreb, Zagreb, Croatia

²Children's Hospital, Pulmonology, Allergology, Immunology, Rheumatology, Pediatric Department, School of Medicine, University of Osijek, Zagreb, Croatia

³Teaching Institute of Public Health "Dr Andija Stampar", School of Medicine University of Zagreb, Zagreb, Croatia

⁴School of Medicine, University of Zagreb, Zagreb Institute of Public Health, School of Medicine University of Zagreb, Microbiology, Zagreb, Croatia