

SCREENING NASOPHARYNGEAL ASPIRATES OF PAEDIATRIC PATIENTS DIAGNOSED WITH ACUTE RESPIRATORY TRACT INFECTIONS FOR HUMAN BOCA VIRUS AND HUMAN CORONAVIRUSES USING PCR

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Viral ARTI are a leading cause of mortality and morbidity in children worldwide. Human Boca virus (HBoV) and Human Coronaviruses (HCoV) are two emerging respiratory viral pathogens capable of causing mild to severe ARTI in children. HBoV and the non-epidemic strains of HCoV account for 2 to 19 % and 50 to 60% of ARTIs in children respectively. Identification and determining incidence and prevalence of these viral agents are imperative to understand the epidemiology related to these viruses and to prevent unwanted use of antibiotics.

Retrospective paediatric NPA samples previously typed for the seven respiratory viruses; RSV, parainfluenza 1, 2, 3, adenoviruses, influenza A and B were used in the study. A total of 84 samples were processed via PCR for HBoV detection, 34 of these were positive for RSV and the rest were negative for all seven viruses. None of the samples were positive for HBoV infection.

For HCoV detection, 15 samples that were negative for the seven viruses were processed via a nested PCR. None of the samples were identified positive for HCoV. Further studies with an increased sample size are required to confirm the absence or presence of HBoV or HCoV infections in children with ARTI in Sri Lanka.

