Molecular Evidence of Other Viral and Bacterial Pathogens Associated with Lower Respiratory Tract Infection in SARS Cov-2 Suspected Patients in District Rathnapura in Sri Lanka.

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Acute respiratory tract infection (RTI) is the most widespread type of acute infection in adults and children and causes significant mortality and morbidity worldwide. However, aetiology remains underdetermined in more than 50% of cases. The main causal agents of community-acquired pneumoniae (CAP) are viruses, bacteria and fungi, out of which viruses are the most common pathogens. Currently, the clinical diagnosis of respiratory tract infections is mostly restricted to a few pathogens, and there are limited data available on etiological agents causing RTIs in Sri Lanka and no data on the involvement of other respiratory viruses in District Rathnapura. A total of 24 nasopharyngeal swabs that were submitted to (from both adults and children who presented with flu-like illness) Teaching Hospital Ratnapura between July and October 2022 were analyzed using RespiFinder assay, which is based on the multiplex ligation-dependent probe amplification (MLPA) technology. Viral RNA was extracted using the QIAamp® MinElute Virus Spin Kit according to the manufacturer's instructions. It followed SARS CoV-2 RT-PCR and RespiFinder assay. Overall, none of the patients was confirmed positive for SARS-CoV-2. Entero/Rhino (25.0%), Influenza B (8.3%), Respiratory Syncytial Virus type B (4.1%), *Chlamydophila pneumoniae* (4.1%). One specimen showed molecular evidence of coinfection with Rhino/Entero and influenza B. Remarkably, our study showed for the first time the molecular evidence of *Chlamydophila pneumoniae* in Sri Lankan setting. This study adds up to current scars data on RTIs in Sri Lanka.

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