

Infection of Respiratory Pathogenic Microorganisms Among Patients Hospitalized Before 20 January 2020 for Influenza Symptoms in Wuhan and Taiyuan, China

Huimin Han¹, Yasin Saed¹, Wenzhu Song¹, Ming Wang¹, and Yafeng Li¹

¹Affiliation not available

January 30, 2024

Abstract

Background: This study aims to find out whether patients admitted to hospitals for influenza symptoms were potentially infected with novel coronavirus [SARS-CoV-2] prior to nucleic acid testing in Wuhan and Taiyuan, China, considering that it broke out during the influenza season and its symptoms mimic influenza. **Methods:** A total of 685 nucleic acid samples of respiratory pathogenic microorganisms were obtained from patients with flu-like symptoms admitted to Renmin Hospital of Wuhan University and Shanxi Provincial People's Hospital, from 1 November 2019 to 20 January 2020. Samples were respectively detected by 13 Respiratory Pathogen Multiplex Detection Kit and Novel Coronavirus (2019-nCoV) Nucleic Acid Diagnostic Kit. **Results:** In Wuhan, human rhinovirus was the most frequent infectious pathogen in November (31.5%), and human respiratory syncytial virus appeared the most in December and January (37.1%, 8.6%, respectively). Generally, 115 patients of 616 patients (18.7%) from Wuhan were recognized as COVID-19, and only two patients were co-infected with other respiratory pathogens. In Taiyuan, influenza A virus was detected the most frequently in December and January (30.3%, 12%, respectively) without infection of SARS-CoV-2 during study period. **Conclusions:** Some cases confirmed as influenza before routine nucleic acid testing of SARS-CoV-2 were attributed to COVID-19.

Hosted file

Article.doc available at <https://authorea.com/users/726235/articles/708862-infection-of-respiratory-pathogenic-microorganisms-among-patients-hospitalized-before-20-january-2020-for-influenza-symptoms-in-wuhan-and-taiyuan-china>

Hosted file

Figure-1.docx available at <https://authorea.com/users/726235/articles/708862-infection-of-respiratory-pathogenic-microorganisms-among-patients-hospitalized-before-20-january-2020-for-influenza-symptoms-in-wuhan-and-taiyuan-china>

Hosted file

Figure-2.docx available at <https://authorea.com/users/726235/articles/708862-infection-of-respiratory-pathogenic-microorganisms-among-patients-hospitalized-before-20-january-2020-for-influenza-symptoms-in-wuhan-and-taiyuan-china>

Hosted file

Table.docx available at <https://authorea.com/users/726235/articles/708862-infection-of-respiratory-pathogenic-microorganisms-among-patients-hospitalized-before-20-january-2020-for-influenza-symptoms-in-wuhan-and-taiyuan-china>