

Clinical Characteristics of Coronavirus-Infected Pneumonia



The recent outbreak of coronavirus has created a global hysteria mainly because not much is known about its clinical presentation, morbidity, and mortality. Prior to this outbreak, only anecdotal reports existed about coronavirus. The outbreak has infected thousands of people and has resulted in hundreds of deaths in China. However, despite this outbreak and global concerns, there is a lack of data regarding the infection.

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Since the initial outbreak of coronavirus was in the city of Wuhan, China, investigators in the city have conducted the first large scale clinical study about the presentation of coronavirus. The study was undertaken to determine the clinical characteristics and epidemiology of coronavirus. This retrospective single-centre study involved 138 hospitalised patients who were confirmed to have coronavirus pneumonia at Zhongnan Hospital of Wuhan University..

The researchers looked at the demographics, laboratory data, imaging features and treatment response in these patients. They also compared the outcome of non-critically ill patients versus critically-ill patients. The median age for the patients admitted was 56 years and 54.3% of the participants were men.

Results

Hospital-acquired transmission affected 40 healthcare professionals (29%) and 17 hospitalised patients (12.3%) in the same ward. Common symptoms included fever in 98.5% patients, fatigue in 69.6% patients and dry cough in 59.4% patients.

Blood work revealed lymphopaenia in 70.3% patients, prolonged prothrombin time in 58% patients, and elevated lactate dehydrogenase in 39.9% of patients. Chest CT scans revealed either ground-glass opacity or bilateral patchy shadows in the lungs of all patients. The majority of patients were prescribed the antiviral drug oseltamivir, and some also received moxifloxacin, ceftriaxone, azithromycin, and glucocorticoid therapy.

Thirty-six patients (26.1%) required admission to the ICU because of complications that included arrhythmias (44.4%). acute respiratory distress syndrome (61.1%]), and shock (30.6%). The median time from the first symptom to the presence of dyspnoea was 5 days, to hospital admission was 7 days, and to ARDS was 8 days. Patients who were managed in the ICU were found to be older, had progressive dyspnoea, anorexia and more likely to have other comorbidity compared to those who did not require ICU admission. Approximately 47.2% of the patients required mechanical ventilation. The rest were managed with high flow oxygen therapy.

Conclusion

This single-centre case study of 138 hospitalised patients with confirmed coronavirus-infected pneumonia revealed that hospital-related transmission of coronavirus was suspected in 41% of the patients; 26% of the patients had to be admitted to the ICU, and mortality was 4.3%.

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