Clinical Characteristics of Coronavirus Disease 2019 in China

Guan W, et al. Corresponding author: 鍾南山教授 NEJM Feb 28, 2020 DOI: 10.1056/NEJMoa2002032

Definitions

Suspected cases: having fever or respiratory symptoms Confirmed COVID-19 case: positive result to high-throughput sequencing or RT-PCR assay for nasal AND pharyngeal swab specimens (no sputum) Fever: axillary temperature \geq 37.5°C Lymphocytopenia: lymphocyte count \leq 1500 cells per mm³

Study Population

Patient Number = 1,099 laboratory-confirmed COVID-19 Number of Hospital = 552 hospitals in 30 provinces, autonomous regions, and municipalities

Treatment:

Intravenous antibiotic therapy = 58%

Oseltamivir = 35.8%

Oxygen therapy = 41.3%

Mechanical ventilation = 6.1%;

Mechanical ventilation: severe disease vs nonsevere disease (14.5% vs. 0%).

Systemic glucocorticoids = 18.6%

Extracorporeal membrane oxygenation was performed in 5 patients (0.5%) with severe disease.

Results

Median Age = 47years

Diagnosis: pneumonia = 91.1%, ARDS=3.4%, Shock=1.1%

Health care workers = 3.5%

Risks: Direct contact with wildlife = 1.9%

Been to Wuhan = 31.3%

Contact with people from Wuhan = 72.3%

Incubation period (median), data based on 291 patients = 4.0 days (IQR, 2 to 7 days)

Signs and symptoms = Fever (87.9%) and cough (67.7%). Diarrhea (3.8%) and vomiting

(5.0%) were rare

Fever occurred in only 43.8% of patients with COVID-19 on presentation but developed in

88.7% following hospitalization.

Duration of hospitalization (median): 12.0 days, (mean, 12.8).

ICU admission =5%, with 2.3% requiring invasive ventilation

Severe disease = 15.7%

Overall mortality rate= 1.4%, Mortality rate in severe disease = 8.1%

Laboratory/Radiologic finding

- 1. Lymphocytopenia: present in 83.2% of the patients on admission
- 2. Leukopenia: present in 33% of patients on admission
- 3. Pneumonia by CT scan = 76.4%
- 4. Chest CT = ground-glass opacity (56.4%) and bilateral patchy shadowing (51.8%).
- 5. No radiologic abnormality was noted on initial presentation in 2.9% (5/173) and 17.9% (157/877) of severe and non-severe cases respectively.

Conclusion:

- The absence of fever in Covid-19 (56.2% during admission) is more frequent than in SARS-CoV (1%) and MERS-CoV infection (2%)
- 2. The total case fatality rate is 1.4%.
- 3. Case fatality rate is 8.1% in severe disease