Case Report

First cure case of 2019 novel coronavirus in Ningxia, China

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Case presentation

On January 19, 2020, a 28-year-old male presented to the hospital with a 2-day history of fever, occasional cough and headache. He disclosed that he worked in Wuhan [1], China (the center of novel coronavirus outbreak) and flew to Yinchuan on the day of admission.

The body temperature of the patient was elevated to 38.5°C (101.3°F, normal range 36.3-37.2 °C/97.34-98.96 °F). Coarse breath sounds were noted in both lungs on auscultation. Laboratory results showed white blood cell count was 4.37 $\times 10^{9}$ /L (normal range, 3.5-9.5 $\times 10^{9}$ /L), neutrophils were 52.8% (normal range, 40-75%) and lymphocytes were 35.9% (normal range, 20-50%); C-reactive protein was 0.55 mg/L (normal range, 0-6 mg/L). Prothrombin time was 11.4s (normal range, 10-14s), activated partial prothrombin time was 29.6s (normal range, 23-35s), Thrombin time was 20.3s (normal range, 13-25s) and D-dimer was 0.30 ug/mL (normal range, 0-1 ug/mL). Unenhanced chest computed tomography (CT) showed multiple patchy ground-glass opacities and consolidation in the right middle lobe and lower lobe of both lungs (Figure 1 A-C). The real-time reverse transcriptase polymerase chain reaction (RT-PCR) of the patient's oropharyngeall swab specimens were positive for 2019 novel coronavirus (nCoV) nucleic acid.

Given epidemiological characteristics that the patient came from the infected area, clinical manifestations, CT findings and laboratory tests, the diagnosis of 2019-nCoV pneumonia was confirmed [2-3]. After receiving 14 days antiviral therapy with moxifloxacin (0.4 g administered intravenously per day), lopinavir/ritonavir (400/100 mg administered orally every 12 hours) and interferon inhalation (5 million IU every 12 hours), the patient clinically improved with obviously reduced pulmonary opacities found at repeat chest CT (Figure 1 D-F) and twice consecutive negative RT-PCR. The temperature returned to 36.5 °C (97.7 °F) from January 22, and the patient discharged on February 3rd. The patient was isolated at home for 14 days after checking out of hospital to monitor temperature every day.

More Information

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Figure 1: Thoracic non-contrast CT images in a 28-year-old male before and after treatment. (A-C), Image shows multiple patchy ground-glass opacities and consolidation in the right middle lobe and basal segments of both lower lobes. (D-F), Follow-up image on January 31 shows obviously reduced ground-glass opacities in the right middle lobe and lower lobes of both lungs. The pulmonary vascular thickening is typical CT sign of the 2019 novel coronavirus pneumonia.



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Ethical approval

Patient's data were anonymized.

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