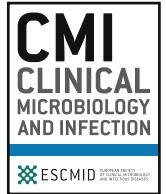




Contents lists available at ScienceDirect

Clinical Microbiology and Infection

journal homepage: www.clinicalmicrobiologyandinfection.com

Letter to the editor

First atypical case of 2019 novel coronavirus in Yan'an, China

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ARTICLE INFO

Article history:

Received 11 February 2020

Accepted 12 February 2020

Available online xxx

Editor: L Leibovici

To the editor

A 60-year-old man with a history of travel to Wuhan, China, where the 2019 novel coronavirus (2019-nCoV) has been spreading [1–3], presented to the emergency department with a 5-day history of unexplained fatigue. The patient's chest CT scan (January 23, 2020) demonstrated a patchy high-density shadow in both lungs (Figs. 1A and C). However, the patient's oropharyngeal swab was negative for the 2019 novel coronavirus on the real-time reverse-transcription PCR assay. He was then admitted to the department of respiratory and critical care medicine for treatment.

Laboratory investigations illustrated that elevated blood levels for C-reactive protein (43.15 mg/L; normal range 0–10 mg/L), high-sensitivity C-reactive protein (>5.0 mg/L; normal range 0–3 mg/L), and erythrocyte sedimentation rate (49 mm/h; normal range 0–20 mm/h). The white blood cell count ($5.2 \times 10^9/L$) and D-dimer (0.26 mg/L; normal range 0–0.5 mg/L) were normal. The lymphocyte count was slightly reduced at $1.16 \times 10^9/L$ (normal range $2.0\text{--}7.0 \times 10^9/L$).

After 5 days of treatment, a chest CT scan (January 28, 2020) was performed again to show patchy consolidation in the dorsal segment of the right upper lobe and lower lobe of both lungs, surrounded by ground-glass-like shadows, with grid shadows and bronchial inflation signs in the lesion (Figs. 1B and D). On January

29, 2020, another sample of the patient's oropharyngeal swab was taken for the 2019-nCoV nucleic acid test, which this time showed a positive result.

Based on epidemiological characteristics, chest imaging, and laboratory findings, the patient was eventually diagnosed with 2019-nCoV pneumonia. However, this case has many special features. First, there were no respiratory symptoms such as fever, cough, and sputum, and the first symptoms were only fatigue. Second, the diagnosis of 2019-nCoV pneumonia requires repeated nucleic acid testing. Moreover, the rapid progression of chest imaging in the short term (<7 days) has critical diagnostic value for patients with negative 2019-nCoV nucleic acid tests.

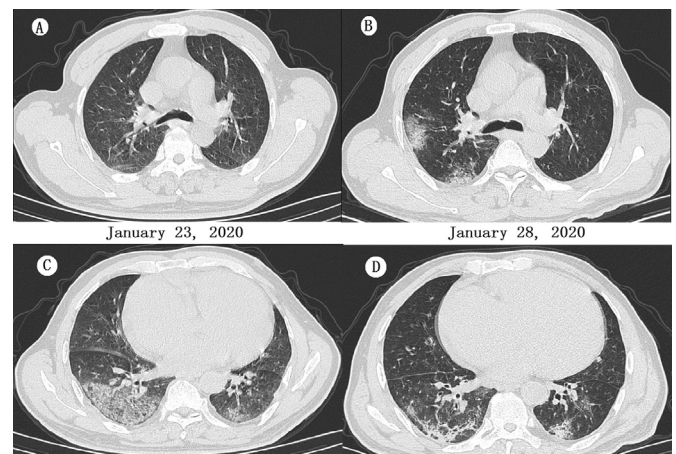


Fig. 1. Comparison of CT images of a 60-year-old man. (A) At the tracheal level, no significant abnormalities were seen in both either lung. (B) Five days later, the image showed multiple frosted glass shadows in the upper lobe of the right lung. (C) Image The image showed multiple patchy consolidations with high-density shadows in the lower lobe of both lungs. (D) Images obtained 5 days later showed partial absorption of the consolidation lesions in the right lower lobe, but fibrosis, bronchiectasis, and vascular thickening occurred.

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<https://doi.org/10.1016/j.cmi.2020.02.011>

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Author contributions

W-DH and X-QH obtained and analysed the clinical data and produced the figure. All authors contributed to editing the figure and writing and editing the manuscript. Written consent for publication was obtained from the patient.

Transparency declaration

We declare no competing interests.

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