IMAGES IN PULMONARY, CRITICAL CARE, SLEEP MEDICINE AND THE SCIENCES

An Asymptomatic Patient with COVID-19

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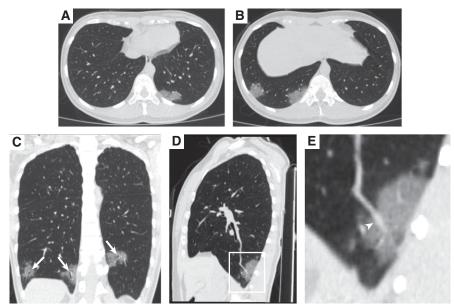


Figure 1. The computed tomography images of an asymptomatic 32-year-old woman with coronavirus disease (COVID-19). (A and B) The axial views of the chest computed tomography examination showing bilateral subpleural areas of multifocal ground-glass opacities in the basal segment of the lower lung fields. (C-E) The coronal (C) and sagittal (D) views showing air bronchogram (C; arrows) and mildly dilated blood vessel (E; arrowhead in the partial enlarged view) within the ground-glass opacities.

A healthy 32-year-old woman, a resident of Wuhan City, traveled to Xi'an City, which is 800 km away, to visit her husband on January 21, 2020. Five days after their reunion, her husband had a fever. On January 27, both of them had nasopharyngeal swabs collected for real-time RT-PCR assays (1, 2). On January 29, both were confirmed with coronavirus disease (COVID-19) by the Chinese Center for Disease Control and Prevention. Surprisingly, the woman was afebrile without chills and cough, and physical examination and laboratory results were unremarkable. However, the chest computed tomography (CT) scan showed bilateral subpleural ground-glass opacities in the lower lobe (Figure 1). She was immediately admitted to the isolation ward and developed a mildly productive cough with no other discomfort on January 30. After 2 days of supportive therapy, the patient recovered well and remained symptom-free until her discharge on February 17 for home isolation.

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Our case verified the asymptomatic infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) as previously reported (3, 4) and suggested that 1) the transmission of COVID-19 seemingly could occur during the incubation period and may cause a potential threat to public health, and 2) the CT examination is very helpful for the early diagnosis of COVID-19 because the abnormalities (e.g., unilateral or bilateral subpleural multifocal ground-glass opacities of the lungs) associated with COVID-19 could be visualized on CT while subjects remain asymptomatic (5).

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