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CLINICAL IMAGE

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A case of COVID-19 with the atypical CT finding

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Abstract

COVID-19 usually demonstrates the specific pattern of chest CT findings (GGO, inverted-halo sign, etc). However, some COVID-19 cases show atypical CT findings. Physicians should make comprehensive judgments.

KEYWORDS

COVID-19, CT, pneumonia, Respiratory medicine

1 | INTRODUCTION

A 30-year-old man presented with a 2-day history of fatigue, fever (39.0℃), and cough without sputum and respiratory failure. 6 days ago, he had participated the banquet and meeting in Tokyo, in which COVID-19 had been spreading. Laboratory tests showed elevated C-reactive protein (4.23mg/dL) without the specific findings about any pathogen. Chest CT revealed only tree-in-bud appearance on the right upper lobe (Figure 1B) and centrilobular nodules with unclear edge on the left lower lobe without typical ground-glass opacity (GGO) as COVID-19 (Figure 1A-C). Diagnosis of COVID-19 was made by RT-PCR from nasopharyngeal swab. He has received supportive care, and the symptoms have improved.

COVID-19 usually demonstrates the specific pattern of chest CT findings, such as GGO, inverted-halo sign, and so on.[1,2] However, it had been reported that several cases showed only atypical findings or no significant findings in chest CT.[1,2] Although the role of CT images for COVID-19 is extremely high, it is also important to recognize that some cases show only atypical findings in CT, especially at a diagnosis. We should not decide whether or not to carry out PCR test based on CT findings alone. At the time, we physicians should make comprehensive judgment for this pandemic situation.

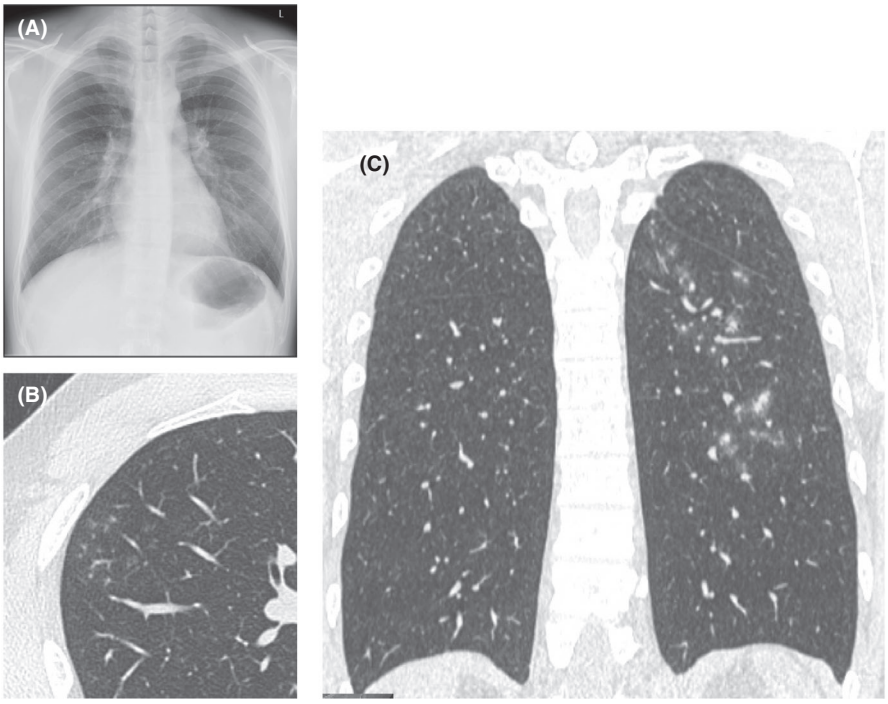

FIGURE 1 Representative images of chest CT. A. Chest X-ray image. B, C. Chest CT image. Tree-in-bud appearance was seen in the right upper lobe (B) and centrilobular nodules with unclear edge, and some ground-glass changes were seen in the left lower lobe (S6) (C)

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CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

RK: managed the patient, collected the data, and wrote the paper. KS: managed the patient and wrote the paper. KM: collected the data, performed the analysis, and wrote the paper. AS: managed the patient and wrote the report.

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