

A case of COVID-19 with the atypical CT finding

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Abstract

We report a case of COVID-19 with only atypical CT findings; tree-in-bud appearance and centri-lobular nodules. Some COVID-19 cases show only atypical CT findings. Physicians should make comprehensive judgements.

Key Clinical Message

We report a case of COVID-19 with only atypical CT findings; tree-in-bud appearance and centri-lobular nodules. Some COVID-19 cases show only atypical CT findings. Physicians should make comprehensive judgements.

Main Text

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 (Fig.1B) and centri-lobular nodules with unclear edge on the left lower lobe without typical ground-glass opacity (GGO) as COVID-19 (Fig. 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 judgement for this pandemic situation.

Author contribution

RK, KS, KM and AS contributed to conception, design and data collection. RK wrote the paper. All authors discussed about this report.

References

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Figure legend

Figure. Representative images of Chest CT

A. Chest X ray image.

B, C. Chest CT image. Tree-in-bud appearance were seen in the right upper lobe (B) and centri-lobular nodules with unclear edge were seen in the left lower lobe.

