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【 PICTURES IN CLINICAL MEDICINE 】

Infiltrative Shadows in COVID-19: Pneumonia or Pulmonary Embolism?

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Key words: COVID-19, pulmonary embolism, SARS-CoV2, contrast-enhanced CT, infiltrative shadow

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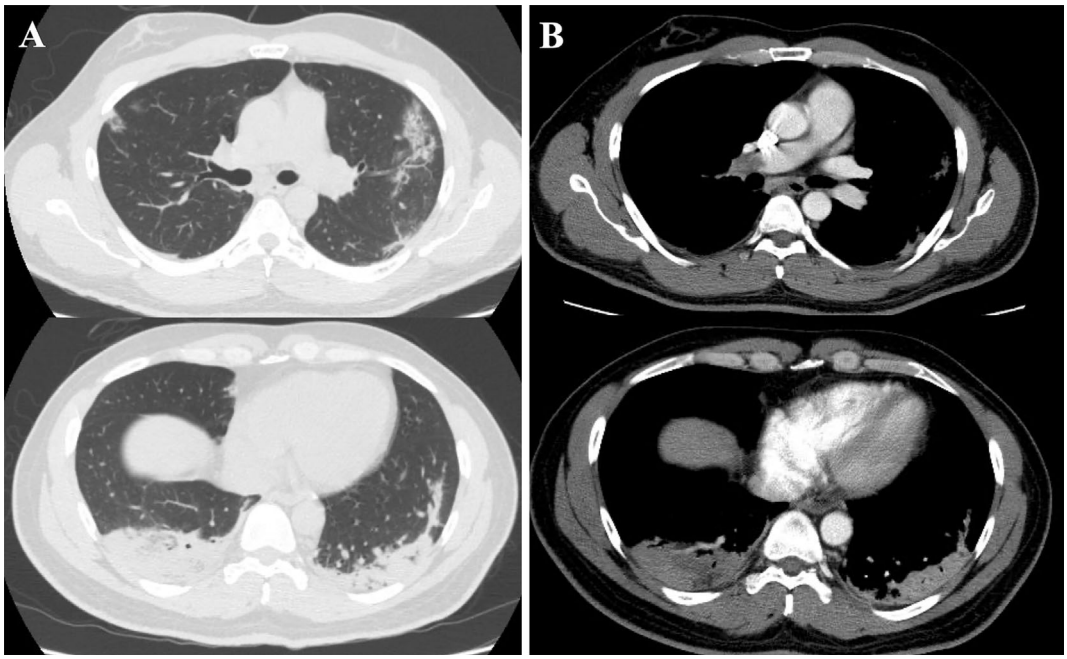

Picture.

A 56-year-old African-American man was referred to our hospital for the assessment of a fever that had persisted for 14 days. His SpO_2 was 88% on ambient air. He did not complain of any symptoms other than a fever. As he had worked in a highly endemic area in Tokyo, a nasopharyngeal swab was taken for SARS-CoV2 reverse transcription polymerase chain reaction (RT-PCR), which was positive. Chest computed tomography (CT) revealed bilateral patchy ground-glass opacities and infiltrative shadows (Picture A). For a further investigation, we performed contrast-enhanced CT, which detected a filling defect at the pulmonary trunk (Picture B). His blood tests revealed an elevated D-dimer level of 29.1 mg/dL. At night on the day of admission, his hypoxemia deteriorated. After two days on intravenous heparin and favipiravir, his symptoms subsided. His D-dimer level decreased promptly but still showed a positive result of 4.6 mg/dL on Day 43. Pulmonary embolus has been reported to be associated with invasive mechanical ventilation (1). Chest CT plays an important role in the management of patients with COVID-19, but consolidation is relatively common in the late second week of COVID-19 (2). Contrast-enhanced CT might therefore be a powerful tool for excluding alternate diagnoses or added pathologies.

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