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Image in medicine Lung cysts in a patient with SARS-CoV-2[☆]

Imágenes quísticas pulmonares en paciente con infección por SARS-CoV-2



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A 67-year-old male with no relevant history and diagnosed with SARS-CoV2 infection. In response to a respiratory deterioration, a computed tomography (CT) angiography was requested, which showed acute pulmonary thromboembolism and extensive ground-glass areas (Fig. 1, blue arrows). With a diagnosis of adult respiratory distress syndrome (ARDS), invasive mechanical ventilation (IMV) was started for 10 days; twenty days later, due to the persistence of dyspnoea, a new high-resolution CT scan was performed, which showed a reduction in ground glass images (Fig. 1, green arrows) and the appearance of several thin-walled cysts in the right upper lobe (Fig. 1, red arrows).

We report the first known case in Europe of pulmonary cysts in SARS-CoV-2 infection. One of the causes of these cystic formations is the decrease in *compliance* caused by ischemia and pulmonary inflammation, while there are authors who associate them with the resolution of consolidations. Furthermore, these cysts could also be justified by the use of IMV in ARDS.

This case shows the variability of radiological manifestations of this new disease and highlights the need for follow-up in these patients in order to evaluate its possible clinical and functional implications.



Fig. 1. a) CT angiography with extensive areas of ground-glass opacities as well as areas with a tendency to consolidate and an air bronchogram in the right upper lobe (RUB) (blue arrows); b) high-resolution computed tomography with several thinwalled cystic images, with the largest being a multi-layered 4.5 cm T axis × 2.3 cm AP axis (red arrows) cyst. All of them located in the apical segment of RUL. In addition, ground glass involvement is identified with some areas of interlobular septal thickening in relation to cobblestone involvement and traction bronchiectasis, mainly in the anterior segment of the RUL (green arrows).

Conflict of interests

The authors declare no conflict of interest.

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