Lobar expression of SARS-CoV-2 pneumonia

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DESCRIPTION

A 59-year-old man with a personal history of gastritis and pulmonary tuberculosis of the left lung without sequelae 40 years earlier was admitted to the emergency department reporting of high fever (maximum 40°C), dry cough and haemoptysis for the past 5 days. He had been subjected to a SARS-CoV-2 PCR screening test 2 days earlier, with an inconclusive result. Laboratory tests revealed lymphopenia and a mild elevation of hepatic transaminases, lactate dehvdrogenase and C reactive protein. The chest X-ray was unremarkable; however, the CT scan revealed a wide area of ground-glass opacity in the right upper lobe (figure 1). The microscopic screening of the sputum was negative for tuberculosis. The patient was diagnosed with COVID-19 after a nowpositive PCR result. He had a favourable evolution, with mild disease and neither respiratory distress nor hypoxemia. He was asymptomatic 5 days later and presented a normal chest X-ray and positive SARS-CoV-2 serology after 1 month of follow-up.

CT imaging has become an important tool in the evaluation of patients with COVID-19. Typical hallmarks of this infection include bilateral, multifocal, lower lobe and posterior-dominant ground-glass opacities and crazy-paving appearance.¹ Lower lobe involvement can be seen in 90% of patients, while 86% present bilateral lesions.² Amorphous patchy, nodular, patchy-nodular and rounded lesions are also commonly found.³ Additionally, more extensive lung

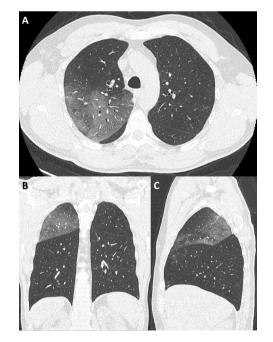


Figure 1 CT scan showing upper lobe COVID-19, bound by its fissures, in the transverse plane (A), coronal plane (B) and sagittal plane (C).

involvement with opacification is associated with dyspnoea and a more severe course of COVID-19.⁴ Isolated upper lobe involvement is infrequent and is more frequently found in early stages of the disease.¹ Moreover, haemoptysis is a rare symptom, reported in less than 5%⁵ of cases, usually associated with a more severe clinical course.⁶

We present a case of isolated right upper lobe involvement that is well limited by its fissure.

Learning points

- Several patients can present with atypical imagiological findings.
- Isolated upper lobe involvement is a possible, although infrequent, presentation of COVID-19.
- ► Haemoptysis is a rare presentation of COVID-19.

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