Neumotórax desarrollado durante el curso de una neumonía por SARS-CoV-2

Pneumothorax developed during the course of SARS-CoV-2 pneumonia

CASE REPORT

Coronavirus disease 2019 (COVID-19) is a recent outbreak in mainland China and has rapidly spread to multiple countries worldwide. The largest case series of chest imaging described multilobar involvement of rounded and peripheral airspace opacities. The occurrence of pneumothorax is rare in SARS-CoV-2 pneumonia.

We are reporting a case of a male who developed a pneumothorax secondary to SARS-CoV-2 pneumonia.

We present a 70-year-old male patient who was admitted to Emergency Department complaining of productive cough with mucopurulent sputum, dyspnea, fever with maximum temperature of 38.4°C and diarrhea for seven days. He had no smoking or alcohol consumption. He didn’t have contact with anyone known to have COVID-19. His personal pathological history included hypertension, type 2 diabetes mellitus and dyslipidemia. He denied known structural pulmonary pathology. On physical examination, the patient was febrile (38.6°C), peripheral oxygen saturation (SpO2) was 88% in room air and a rude vesicular murmur and bilateral intermittent wheezing were identified.

Pertinent laboratory results showed increased inflammatory parameters (leukocytosis of 10,4x10⁹ cells/L with neutrophilia of 91% and CRP of 32mg/dl) and acute kidney injury (creatinine 1.95 mg/dl and urea 100 mg/dl). Arterial gasometry with FiO₂ 24% revealed acute type 1 respiratory failure, with PaO₂ 73mmHg. Chest radiograph showed right lower lobe interstitial infiltrate (image 1) and chest computed tomography (CT) scan showed bilateral ground glass opacities and extensive areas of alveolar consolidation with airbronchogram. Influenza A and B were negative, as well as Legionella pneumophila antigenuria and serology for Mycoplasma pneumoniae. Oropharyngeal and nasopharyngeal swab test for SARS-CoV-2 by qualitative real-time reverse-transcriptase–polymerase-chain-reaction (RT-PCR) assay was positive.

The patient started empirical antibiotherapy with ceftriaxone and azithromycin as well as hydroxychloroquine and lopinavir/ritonavir.

On the 5th day of hospitalization, the patient was on a 31% ventury mask. His chest radiograph which showed a spontaneous left pneumothorax, and therefore a 16F caliber chest tube was placed in the 5th left intercostal space. Total pulmonary re-expansion was observed 48 hours later, and chest tube was removed.

The patient was discharged after 3 weeks of hospitalization without further respiratory complications.

REFERENCES

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