

Fibrotic Interstitial Lung Disease as a Sequelae of Coronavirus Disease 2019 Pneumonia: A Case Report

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ABSTRACT

Background : About one-third of hospitalized COVID -19 patients eventually develop post-disease fibrotic interstitial lung disease (ILD) upon recovery . The objective of this case report is to describe this emerging complication in a Nigerian woman and emphasize the need for enhanced surveillance.

Methods: A case report of a Nigerian woman managed for post -COVID -19 complications at the Infectious Diseases /Tropical Medicine Unit of the University of Nigeria Teaching Hospital (UNTH) in January /February 2021.

Results: A 74-year-old woman with background hypertension who presented with productive cough, low - grade fever and breathlessness of 2 weeks duration, with associated pleuritic chest pain, anosmia, dysgeusia and headache. Relevant investigations showed anaemia , leucocytosis with neutrophilia and lymphocytosis , elevated C-reactive protein (CRP), elevated erythrocyte sedimentation rate (ESR) and elevated D-dimer . Chest radiograph revealed reduced lung volumes in the right lung. Real time polymerase chain reaction (RT-PCR) of nasopharyngeal / oropharyngeal swab samples was positive for SARS -CoV-2. She was diagnosed as severe COVID-19 pneumonia possibly complicated by lung fibrosis. She was admitted in the isolation centre under strict infection prevention and control (IPC) guidelines and commenced on non- invasive ventilation (NIV) using continuous positive airway pressure (CPAP), anticoagulants, low-dose corticosteroids, antibiotics, ivermectin and colchicine. After 11 days of intensive care unit admission, she was discharged to the ward following remarkable improvement, and was eventually discharged on day 25. At her first visit at the post - COVID -19 clinic, high -resolution computed tomography (HRCT) of the chest showed coarse interstitial densities dominated by peri-bronchial cuffing bilaterally; ground glass densities on both apices and patchy fibrotic sub-pleural densities in the right lung base. Pulmonary function tests (PFTs) revealed moderate restrictive disease. She reported residual breathlessness but was otherwise stable.

Conclusions: This case reinforces the need for close outpatient follow up of patients who recovered from symptomatic COVID-19. Since the true long-term implications of the disease are still evolving, there is a need for clinicians to maintain vigilance in order to ensure early recognition and timely management of complications to prevent permanent lung damage.

Key words: COVID-19, fibrosis, interstitial lung disease, pneumonia