



Lung Fibrosis Following Acute Covid-19 Infection in an Infant

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To the Editor: Almost 70%–80% of patients recovering from COVID-19 present with persistence of 1 or more symptoms of which pulmonary fibrosis is a serious complication [1]. A third of COVID-19 affected adults developed lung fibrosis [2]. In one pediatric study fibrosis occurred in four (4/14, 29%) patients [3]. A 10-mo COVID 19 RT-PCR–positive infant with fever and cough was admitted with respiratory failure and shock. Chest radiograph revealed bilateral pneumonia. CT chest at 2 wk of onset showed ground glass opacity and fibrosis in bilateral middle and lower zones. She was on invasive ventilation for 10 d, developed severe ARDS, required high PEEP (10 cm H₂O), followed by weaning through noninvasive ventilation (NIV) and heated humidified high-flow nasal cannula (HHNC), nasal cannula, and finally room air. Patient received 0.75 mg/kg methyl prednisolone for 7 d and oral prednisolone tapered over 2 wk, inj. remdesivir (5 mg/kg on day 1, 2.5 mg/kg from day 2 to day 5), inj. enoxaparin. Azithromycin (5 mg/kg for 3 mo) and azathioprine (5 mg/kg/d orally for 3 mo) were started. CT scan after 4 wk of initial scan showed considerable improvement. Hence, azathioprine may be useful in treating pediatric post-COVID pulmonary fibrosis. A randomized, controlled trial showed improvement in the prednisone/azathioprine group compared to prednisone/placebo group in case of adult lung fibrosis [4]. Azithromycin (250–500 mg) is used as an immunomodulator, in patients with chronic inflammatory lung disease. As both drugs are well tolerated in children, we used them in our case. Pediatric post-COVID

pulmonary fibrosis is a rare entity, and most of the literature is focused on adult patients with limited discussion on treatment and outcome. In this respect our report is unique and may contribute significantly to the knowledge base of pediatric COVID and help in protocolizing the management of pediatric post-COVID pulmonary fibrosis.

Declarations

Conflict of Interest None.

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