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1. INTRODUCTION

- Extraintestinal manifestations of Crohn's disease (CD) generally correlate to the disease activity and may be seen in **1 of 4 patients** with CD.
- Though the prevalence of bronchopulmonary manifestations in CD is 0.4%, subclinical pulmonary changes may be seen in up to half of adults with CD, with involvement of the tracheobronchial tree, lung parenchyma or the pleura.

2. CASE REPORT

- A 61-year-old man, with a history of CD diagnosed two years ago, currently in remission with mesalamine, was admitted to the ICU with acute hypoxic respiratory failure due to COVID-19.
- Inflammatory markers were elevated, and he needed high-flow nasal cannula. He was started on a 5-day course of dexamethasone.
- By HOD-9, O₂ requirement and inflammatory markers had trended down.
- However, around HOD-10 his O₂ requirement increased to 6-10 L at rest.
- CT-chest showed peripherally distributed ground-glass opacities and superimposed early diffuse fibrotic lung changes.
- Superadded bacterial infection was ruled out.
- Mesalamine was discontinued and the patient was started on a course of iv methylprednisolone, after which oxygen requirements dramatically declined.

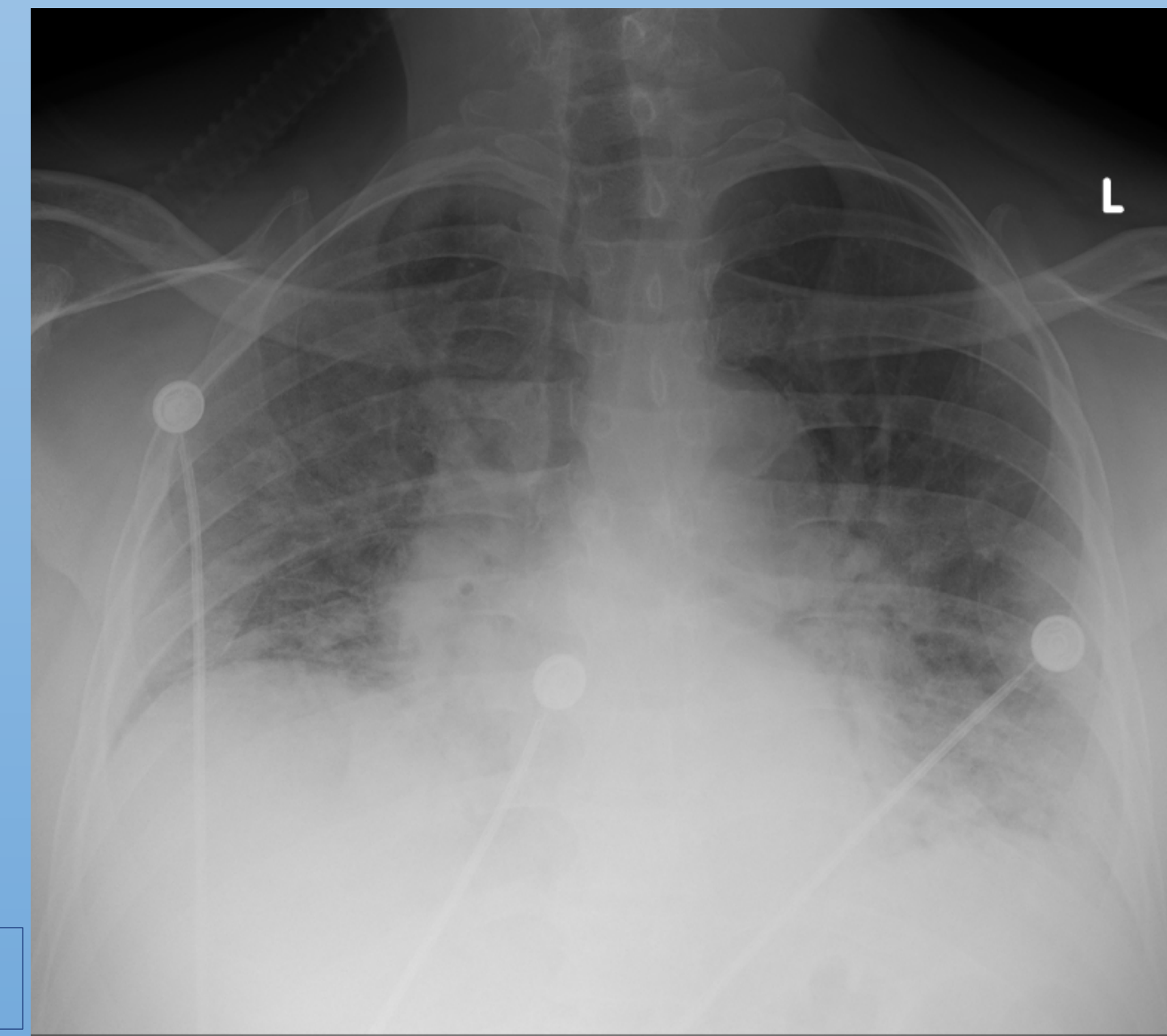


Fig A

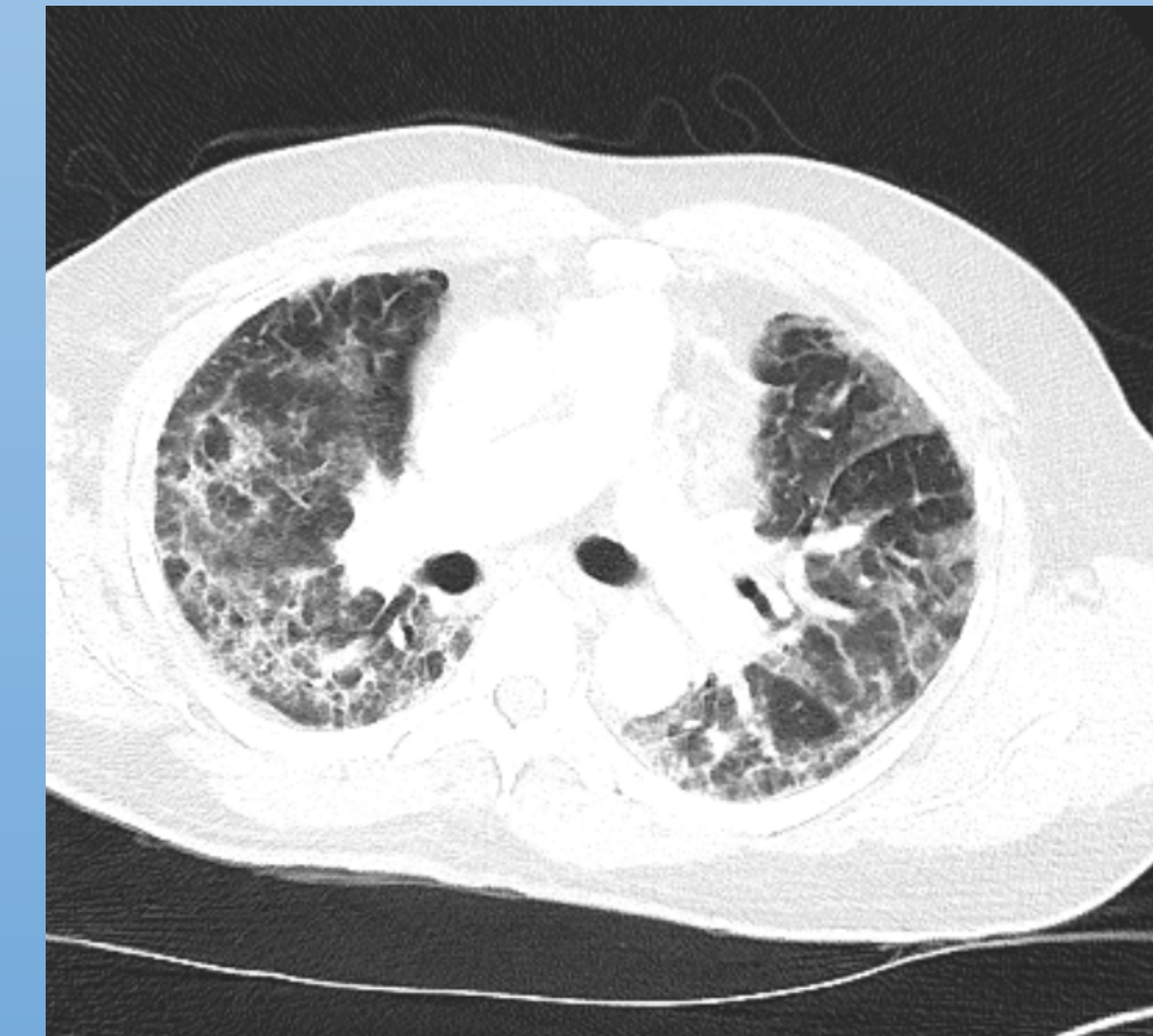


Fig B



Fig C

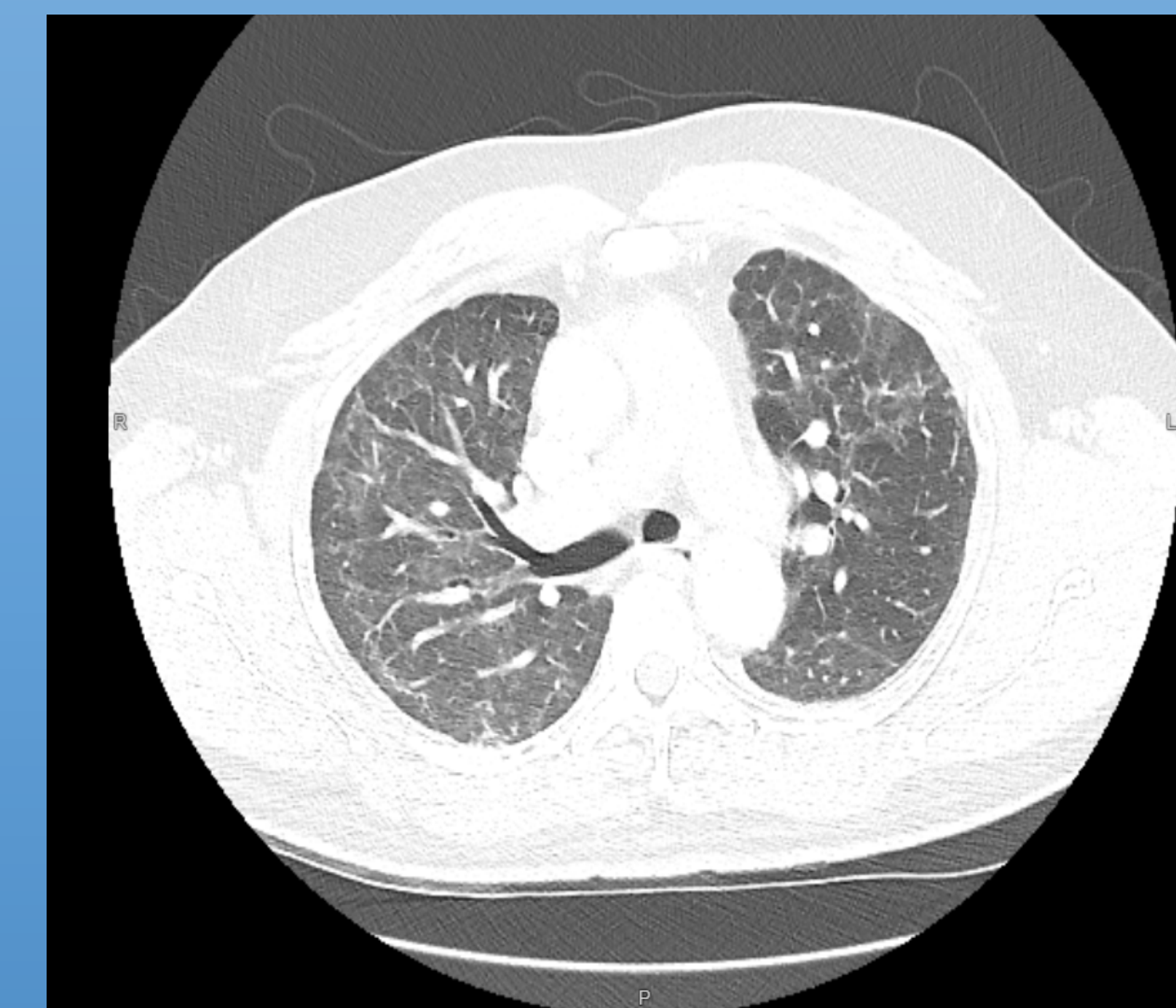


Fig D

A: Portable Chest X-ray showing multifocal pneumonia, low lung volumes with bilateral patchy airspace disease

B, C: CT-Chest showing peripherally distributed ground-glass opacities, distributed in upper and lower lobes. There were superimposed early diffuse lung fibrotic changes, without any evidence of pulmonary thromboembolism

D: 5 months post-discharge, showing improvement in opacities

Latent interstitial pulmonary involvement is seen in 20%-55% of patients with IBD, with the most common manifestation being drug-induced lung disease, due to sulfasalazine, mesalamine, methotrexate, or anti-TNF agents.

- He was discharged on HOD 24 with 2L O₂ at rest and 4L on ambulation and a prednisone taper.
- Chest x-ray in 8 weeks showed improving infiltrates. On follow-up 5 months later, he was not on O₂ anymore and was doing well.

3. DISCUSSION

- Pulmonary function tests** can help in early identification of lung injury since respiratory involvement is latent many times.
- Onset of drug reaction can occur from 5 days to 44 months after initiation of **mesalamine therapy** and has been reported in the form of eosinophilic pneumonia, organizing pneumonia, nonspecific interstitial pneumonia and hypersensitivity pneumonitis.
- The absence of other extra-intestinal manifestations, and the remission of CD itself, can be helpful in excluding other pulmonary manifestations of CD from drug-induced lung disease.
- Discontinuation of the causative drug**, along with a course of steroids, can help in reversing the symptoms.
- Though the differential of mesalamine-induced lung injury, cannot be confirmed nor excluded here, this patient probably had underlying lung pathology from his CD or its treatment, making his recovery from COVID-19 more complicated.