



THE OLD, THE YOUNG AND THE DISEASED CASE SERIES OF POST COVID PNEUMOTHORAX

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Introduction

Coronavirus Disease 2019 (COVID-19) presents with variety of complications, respiratory as well as non-respiratory(1). Pneumothorax is a recognized complication with the overall incidence of 0.3%(2). However, it increases to 12.8–23.8% in those requiring invasive mechanical ventilation (IMV)(2). Prompt identification and management of pneumothorax in COVID-19 is vital in achieving a favorable outcome.

Case 1

51-years-old hypertensive male presented on day 30 post COVID-19 (category 5a) infection, complaining of worsening dyspnea, prolonged cough and right pleuritic chest pain. Clinically he was tachypneic, hypoxic and has a large right-sided pneumothorax which was confirmed by chest x-ray (CXR)(Figure 1).



Figure 1

Case 2

18-years-old morbidly obese male presented on day 25 post COVID-19 (category 2) infection with dyspnea, hemoptysis and left pleuritic chest pain. He was comfortable under room air despite clinical and radiological evidence of large left pneumothorax (Figure 2).

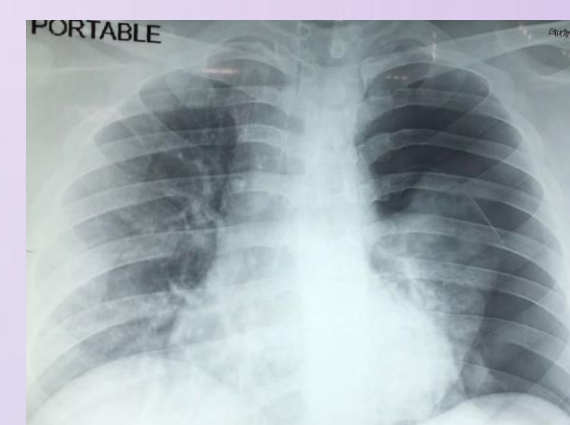


Figure 2

Case 3

76-year-old with underlying Pulmonary Tuberculosis (PTB), Chronic Obstructive Pulmonary Disease (COPD) presented on day 51 post COVID-19 (category 1) infection with dyspnea. Initial assessment suggestive of acute exacerbation of COPD and treated accordingly but to no avail. His CXR revealed right pneumothorax (Figure 3).



Figure 3

Discussion

In Covid-19 infection, it has been suggested that the reason for pneumothorax is due to the damaged lung tissues and increased intrapulmonary pressures either from persistent coughing or assisted ventilation(1,3). The onset is reported around 9.0–19.6 days from admission and 5.4 days after IMV initiation(2). In terms of gender, Miro et al found no difference between male and female(2). Up to date, there are no published data on correlation between category of Covid-19 infection and risk of developing pneumothorax.

Our three patients were all male, presented on Day 25-51 post Covid-19 infection and none of them had IMV when treated for Covid-19. Case 3 had underlying lung disease and presented on day 51, raising suspicion that the pneumothorax may not be due to his Covid-19 infection.

Conclusion

Spontaneous pneumothorax is a rare complication of COVID-19 viral pneumonia and may occur in the absence of mechanical ventilation. Clinicians should be vigilant about the diagnosis and treatment of this complication.

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Declaration of conflict for all authors

The authors declare that there are no conflict of interests.

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