

Pneumomediastinum's Effects on Coronavirus (COVID) Respiratory Disease: A Commentary

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Description

Pneumomediastinum, or the presence of air in the mediastinum, is a common complication following surgery, artificial ventilation and trauma. Asthma and chronic obstructive pulmonary disease are two lung disorders that may cause it to occur spontaneously (COPD). In this report, we describe a case of COVID-19 pneumonia that progressed into an expansive pneumomediastinum with pneumopericardium during the course of hospitalisation without any initial lung problems or typical hazard indicators for pneumomediastinum [1].

Coronavirus complaint 2019 (COVID-19) is a brand-new complaint whose pathogenesis, clinical trajectory and treatment choices are currently being described. The World Health Organization (WHO) first received the complaint in Wuhan, China, in December 2019 and later gave it the designation "COVID- 19" on February 11, 2020. The clinical manifestations of COVID-19 pneumonia range from mild flu-like symptoms at one end of the spectrum to severe ARDS at the other. Acute order injury, cardiac injury, liver dysfunction, thromboembolic complaint and pneumothorax are additional generally documented consequences. Robotic pneumomediastinum (SPM) is a rare, benign and tone-limiting illness, with mortality typically attributed to the countries supporting the complaint, according to colourful literature. Although it has been reported in cases with interstitial lung complaints, it is typically encountered in cases with underlying obstructive lung complaints. Only a small number of COVID-19 infection cases have been reported. This research emphasises SPM as an implicit side effect of pneumonia caused by COVID-19 [2].

Although the precise medium of SPM in COVID- 19 is unknown, the COVID-19 contagion is capable of triggering an excessively susceptible reaction in the host that results in extensive tissue damage. According to published research, the likely progression of events leading to pneumomediastinum development could include the rupture of an alveolar wall that has been injured, air analysis along the bronchovascular jacket and free air entering the mediastinum. The air analysis may result in pneumopericardium, pneumothorax, pneumoperitoneum, or subcutaneous emphysema depending on the towel planes implicated. Common driving variables include occurrences that increase alveolar pressure, such as mechanical ventilation, the Valsalva manoeuvre, or other causes like the insertion of a central line. Other potential processes include ferocious coughing, emesis, or other pushes that raise the intrathoracic pressure. Since the patient had no other risk factors or precipitating events, we hypothesise that his cough constituted the case's likely aetiology [3].

This example illustrates the likelihood of a late-onset, severe, life-threatening consequence resulting from extensive COVID-19 pneumonia in an

additional clinically perfect patient, necessitating the need for true caution on the part of caregivers. ARDS, abrupt respiratory failure, superimposed bacterial infection, pulmonary embolism and lung scarring are now known to frequently follow COVID-19 pneumonia, although SPM is not a commonly observed condition and is hence not frequently suspected. SPM is a condition that puts your life in danger and calls for aggressive treatment [4]. In this instance, the patient began receiving probative care and curatives aimed at minimising triggers such excessive coughing in addition to high FiO₂ supplemental oxygenation for better pneumomediastinum absorption. The distinction between pneumomediastinum and other conditions with similar clinical symptoms that require immediate medical attention is also crucial. These conditions include pulmonary embolism, cardiac tamponade, acute coronary syndrome, myopericarditis, aortic analysis and mediastinitis, some of which may be side effects of COVID-19 infection or co-morbid conditions. As seen in this case, SPM can be effectively treated non-surgically. However, patients should be on the lookout for any complications, such as the development of pressure pneumothorax and pressure pneumomediastinum, which have a high mortality rate [5].

Conclusion

We come to the conclusion that because robotic pneumomediastinum is a possibility, deteriorating casket pain, tachycardia and oxygen desaturation in a case with severe COVID-19 pneumonia require immediate imaging and vigilant monitoring. Clinicians must be cognizant of SPM as a significant consequence given the startling global prevalence of COVID-19 cases.

Acknowledgement

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Conflict of Interest

None.

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