

Prone Position in a Patient with Acute Respiratory Failure and Pneumomediastinum Coronavirus Disease 2019 Related

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Background: Covid 19 is a disease with peculiar characteristics that are only partially reminiscent of ARDS. We know that pronation improves oxygenation in ARDS [1]. In Covid 19 pneumonia, rare cases of pneumomediastinum have also been described in patients not undergoing ventilation as in our clinical case.

Case history: A 60-years-old man is hospitalized for Covid 19 with acute respiratory failure. He immediately began O₂ therapy with a 60% Venturi Mask. On the fourth day, he had sudden chest pain after cough and a desaturation at 88% in supine position, for which HFNC starts with the flow of 50 L/min and FiO₂ 90%. Immediately, practice chest CT that shows a worsening of the TC score and pneumomediastinum and emphysema of the subcutaneous tissues of the neck. The patient begins a continuous prone position with a lower flow (25 L/min). Pronation immediately benefits the

patient with SpO₂ consistently higher than 95%. Subsequently, he performed a control chest CT with evidence of resolution of the pneumomediastinum. To the admission, the patient didn't need O₂ therapy at rest.

Discussion: The prone position in COVID 19 improve oxygenation, and our patient overcame the pneumomediastinum, a severe and rare complication of Covid 19.

References

- 1 De Bels D, Redant S, Honoré PM (2021) Prone positioning in coronavirus disease 2019 patients with acute respiratory distress syndrome: How and when is the best way to do it? J Transl Int Med 9: 65-67.