Prone Positioning and Clinical Outcomes of Mechanically Ventilated Patients with Severe Acute Respiratory Distress Syndrome

Authors : Maha Salah Abdullah Ismail, Mahmoud M. Alsagheir, Mohammed Salah Abd Allah

Abstract : Acute respiratory distress syndrome (ARDS) is characterized by permeability pulmonary edema and refractory hypoxemia. Lung-protective ventilation is still the key of better outcome in ARDS. Prone position reduces the trans-pulmonary pressure gradient, recruiting collapsed regions of the lung without increasing airway pressure or hyperinflation. Prone ventilation showed improved oxygenation and improved outcomes in severe hypoxemic patients with ARDS. This study evaluates the effect of prone positioning on mechanically ventilated patients with ARDS. A quasi-experimental design was carried out at Critical Care Units, on 60 patients. Two tools were utilized to collect data; Socio demographic, medical and clinical outcomes data sheet. Results of the present study indicated that prone position improves oxygenation in patients with severe respiratory distress syndrome. The study recommended that use prone position in patients with severe ARDS, as early as possible and for long sessions. Also, replication of this study on larger probability sample at the different geographical location is highly recommended.

Keywords : acute respiratory distress syndrome, critical care, mechanical ventilation, prone position
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