

Faculty of Medicine
Critical Care Medicine



Study of Airway pressure release ventilation versus low tidal volume ventilation in hospital outcome of acute respiratory distress syndrome

A thesis

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Submitted by

Rabab Mahoumed Fawzy

(M.B.B.Ch)

Assistant lecturer of critical care medicine
Faculty of medicine - Fayoum University

Supervised by

Assist. Prof. Osama Mahmoud Momtaz.MD

Assistant professor of Critical Care Medicine
Faculty of Medicine - Fayoum University

Prof. RadwaAhmed El Hefeny.MD

professor of chest disease
Faculty of Medicine – Fayoum University

Dr. Ahmed Fathy El Khateeb.MD

Lecturer of Critical Care Medicine
Faculty of Medicine – Fayoum University

Fayoum University

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Candidate name: Rabab Mahmoud Fawzy Mohammed

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Supervisors:

1. Assist. Prof. Osama Mahmoud Momtaz.

2. Prof. Radwa Ahmed El Hefeny.

3. Dr. Ahmed Fathy El Khateeb.

Department: Critical Care Medicine Specialization: Critical Care Medicine

Approval Date: / /

ABSTRACT

Acute respiratory distress syndrome (ARDS) continues to be a major cause of morbidity and mortality although lung-protective low-tidal volume ventilation (LTVV) is widely accepted as the standard of care, clinicians have reported the successful use of alternate modes, such as airway pressure release ventilation (APRV),

Aim and objectives; to evaluate the application of Airway pressure release ventilation (APRV) compared to low tidal volume strategy in management of acute respiratory distress syndrome and the effect of both on predicting outcome.

methods; the study enrolled (100) patients diagnosed ARDS patient in the Critical Care All patients will initially have ventilated with volume assisted-control ventilation (VCV) Ventilator prior to randomization to the APRV study or low tidal volume strategy.

Result; There were significant difference between both groups as regard PaO₂(3) it increase in group A than group B with Value (0.003) and P/F (3) according to Mortality There were no significant difference, 28 (56%) alive, 22 (44%) died in group A and 22 (44%) alive, 28 (56%) died, in group B.

Conclusion; APRV can be used safely in ARDS without adverse effects on hemodynamics or arterial blood gases; moreover, it can significantly improve oxygenation. Also, APRV use less dose of sedatives in comparison to conventional ventilation. However, APRV has no advantages over conventional ventilation regarding mortality outcome hospital.