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List of Abbreviations

APACHE II : Acute Physiology and Chronic Health Evaluation II

APRV : Airway pressure release ventilation

Bipap : Bilevel Positive Airway Pressure

CI : Cardiac index

CO : Cardiac output

DO₂ : Oxygen delivery

EGF : Epidermal growth factor

FiO₂ : Fraction of inspired oxygen

HFOV : High Frequency Oscillatory Ventilation

I:E ratio : Inspiratory: Expiratory ratio

ICU : Intensive Care Unit

IRV : Inverse Ratio Ventilation

IVC : Inferior vena cava

LIP : Lower inflection point

LTVV : Low tidal volume ventilation

mPaw : mean airway pressure

OI : Oxygenation Index

P high : High pressure

P low : Low pressure

PaCO₂ : Arterial carbon dioxide tension

PaO₂	: Arterial oxygen tension
PEEP	: Peak end expiratory pressure
PEF	: Peak expiratory flow
PELOD score	: Paediatric logistic organ dysfunction score
PICU	: Pediatric intensive care unit
P-V curve	: Pressure-volume curve
SIMV	: Synchronized intermittent mandatory ventilation
SpO₂	: Oxyhemoglobin saturation
T high	: Inspiratory time
T low	: Expiratory time
UIP	: Upper inflection point
VAP	: Ventilator associated pneumonia
VILI	: Ventilator induced lung injury
V E	: The minute ventilation
WOB	: Work of breathing

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Introduction





Aim of the Work





Review of Literature





Chapter (1)

Acute Respiratory Distress Syndrome





Chapter (2)

**Mechanical Ventilation
in Acute Respiratory
Distress Syndrome**





Chapter (3)

Biphasic Positive Airway Pressure and Airway Pressure Release Mode





Subjects and Methods





Results





Discussion

