

FROM HYPOXIA TO HOPE: NAVIGATING ARDS

AKM FERDOUS RAHMAN¹

Acute respiratory distress syndrome (ARDS) remains a major cause of acute hypoxemic respiratory failure and critical illness, with persistently high morbidity and mortality despite advances in supportive care. The 2024 global ARDS definition expands syndrome recognition by including patients receiving high-flow nasal oxygen, permitting use of SpO₂/FiO₂ when appropriate, and incorporating lung ultrasound, thereby improving diagnostic applicability across diverse care settings. Contemporary ARDS management is centered on early diagnosis, lung-protective ventilation using low tidal volumes and limited inspiratory pressures, individualized PEEP, and timely prone positioning in moderate-to-severe disease. Updated ATS and ESICM recommendations support prone positioning as a core intervention, endorse selective use of corticosteroids, neuromuscular blockade in early severe ARDS, and venovenous extracorporeal membrane oxygenation in carefully selected patients with refractory hypoxemia, while recommending against prolonged recruitment maneuvers as routine practice. Together, these advances reflect a shift from a narrowly oxygenation-focused model toward earlier, physiology-guided, and context-adapted care that aims to reduce ventilator-induced lung injury and improve timely escalation. ARDS management is evolving toward earlier diagnosis and more precise supportive treatment. Integration of the global definition with current evidence-based strategies may improve case identification, therapeutic timing, and applicability of ARDS care, particularly in resource-limited settings.

Keywords: Acute respiratory distress syndrome; Hypoxemic respiratory failure; Lung-protective ventilation; Prone positioning.

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Affiliation:

1. Associate Professor, Department of Critical Care Medicine, Dhaka Medical College, E-mail: ferdouscmc@yahoo.com