

Editorial

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Acute respiratory distress syndrome: continuing challenges

The death rate from acute respiratory distress syndrome (ARDS) was high during the early days of its documentation [1]. The mortality from ARDS has been decreasing over the years due to several factors including improved supportive care, sedation, nutritional support, treatment of nosocomial pneumonia, and a more evidence-based approach to mechanical ventilation [2]. These interventions require tailoring care targeted toward individual patients.

Sedation and analgesia can be helpful in patients with ARDS, particularly in patients with anxiety and delirium to control agitation, improve tolerance of mechanical ventilation, and decrease oxygen consumption [3]. Some patients require oxygen supplementation and a ventilator [4]. Evidence-based approaches to mechanical ventilation and adjustments of $\text{PaO}_2/\text{FiO}_2$ according to severity of gas exchange abnormalities are available [5].

Ventilator-associated pneumonia (VAP) is a frequent complication of ARDS. Clinical guidelines to care for VAP in ARDS are available [6].

The paper by Sanguanswong and Kongpolprom published in this volume [7] suggests that even in a university hospital, the 28-day mortality of ARDS in patients admitted to the intensive care unit (ICU) is high. It was also found that the average tidal volume and fluid balance are greater than the protective limits. Data elsewhere suggest that a conservative fluid management strategy that aims to minimize or eliminate positive fluid balance is desirable. Conservation of fluid management in adults with respiratory distress syndrome can improve cognitive outcomes and long-term neuropsychological function in survivors of acute lung injury [8].

Thus, continuing challenges exist and must be addressed to achieve an improvement in ARDS outcomes. Evidence-based

approaches particularly from collaborative studies are desirable.

Many causes of ARDS have been documented but only a few common causes account for most cases of ARDS in the medical ICU such as pneumonia, sepsis, and aspiration [9]. Early identification and early treatment of cases before the need for ICU admission remain a challenge and would require a close collaboration between healthcare providers and hospitalized patients.

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*Correspondence to: Editorial Office of Asian Biomedicine, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand, e-mail: abmjourn@chula.ac.th

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