

[TJS3]TSCCM-JSICM Symposium3

Mechanical ventilation

Chair: Toru Kotani (Department of Intensive Care Medicine, Showa University, Japan), Adisorn Wongsakul (Phramongkutklao Hospital, Thailand)

Fri. Mar 1, 2019 3:10 PM - 4:25 PM 第11会場 (国立京都国際会館1F Room C-2)

[TJS3-1]Weaning from mechanical ventilation in ARDS patients : Does automated weaning make our lives easier?

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【ライブ配信】

Prolonged period of mechanical ventilation is associated with increased morbidity and mortality. Thus, prompt liberation from mechanical ventilation is of utmost importance in respiratory management. Although weaning from mechanical ventilation is a simple process in many cases, a weaning process is often complicated and challenging in patients with acute respiratory distress syndrome (ARDS), due to severe lung injury.

When we consider a weaning process, 3 steps; initiation, transition, and completion, should be taken into account. In patients treated for ARDS, the weaning can be initiated when inflammatory response and gas exchange are improved. Conventionally rapid shallow breathing index or P/F ratio is often used as an assessment tool for evaluation, but its accuracy to predict successful weaning is limited. Other methods, such as measuring esophageal pressure, P 0.1, and presence of asynchrony are potential parameters to evaluate a weaning process.

Protocolized weaning has been proven to reduce weaning duration, but the problem associated with protocol adherence and implementation is a great weakness. With development of closed loop ventilation, various modes for mechanical ventilation have been introduced as a potential tool for automated weaning. While some modes such as Smart Care / PS or Adaptive Support Ventilation (ASV) have been reported to reduce weaning time or duration of mechanical ventilation, studies examining their effectiveness in ARDS are limited.

In this session, various closed loop ventilation modes (Smart Care / PS, ASV, Intellivent) that could be used for automated weaning are introduced. Furthermore their potential benefits and safety in patients with ARDS are discussed.