



Physical manoeuvres in patients with ARDS and low compliance: bedside approaches to detect lung hyperinflation and optimise mechanical ventilation

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Chest wall compression may detect lung hyperinflation at the bedside in patients undergoing mechanical ventilation with ARDS and low compliance. This manoeuvre may optimise ventilator settings during mechanical ventilation. <https://bit.ly/43lz8PU>

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Mechanical ventilation in acute respiratory distress syndrome (ARDS) aims at delivering protective tidal volume within lungs that are characterised both by collapsed and hyperinflated tissue, and gravity plays a key role in the distribution of aeration [1]. Therefore, mechanical factors exterior to the lungs influence ventilation–perfusion relationships. For instance, prone positioning affects lung and chest wall geometry leading to beneficial physiological changes [2], whereas chest wall restriction is known to decrease lung resting volume [3]; applying negative pressure on the abdomen may generate a regional reopening of the lung [4]. Furthermore, sequential lateral positioning has been recently proposed as a potential manoeuvre to redistribute lung resting volume and promote alveolar recruitment [5].