

Background: Since the first description of ARDS, PEEP has remained an essential component in its management, aiming to improve gas exchange and keep the airways and alveoli open. However, the response to PEEP varies among patients, depending on pulmonary recruitability. The assessment of this potential can be performed in different ways, but there is still no consensus on the best clinical method for its measurement.

Objectives: The aim of this study was to compare four common clinical methods of assessing response to PEEP, using mechanical ventilator data and correlating them with clinical and mechanical characteristics of patients with ARDS.

Methods: This is a secondary analysis study of a prospective cohort of patients with ARDS. Inclusion criteria were age > 18 years, diagnosis of severe ARDS ($\text{PaO}_2/\text{FiO}_2 < 100$ sustained for at least 2 hours), and mechanical ventilation (MV) time = 48 hours. Patients with contraindications for alveolar recruitment maneuver (ARM), such as intracranial hypertension (ICH), undrained pneumothorax, and severe hemodynamic instability, were excluded. Patients were assessed by four methods before ARM: Stress Index (SI), morphology of the PxV curve, hysteresis, and Recruitment to Inflation ratio (RI-ratio). They were classified as "potentially recruitable" or "poorly recruitable" and underwent ARM as a rescue strategy. After the maneuver, the recruitment response was assessed.

Results: A total of 86 individuals were evaluated, with a mean age of 60.9 ± 12.1 years. The average length of stay was 17.4 ± 12 days, and the average MV time was 13.5 ± 7.8 days, with a mortality rate of 44.2% ($n=38$). The morphology of the PxV curve (AUC = 0.827 [95% CI 0.73–0.92]; $p=0.047$), hysteresis (AUC = 0.896 [95% CI 0.83–0.96]; $p=0.035$), and RI-ratio (AUC = 0.878 [95% CI 0.80–0.95]; $p=0.037$) were equivalent predictors, with no statistically significant difference between them (SMD: 0.126, 95% CI -0.113 - 0.129; $p=0.867$). SI had an AUC of 0.64 ($p=0.061$), not being a good predictor of response to PEEP. The "cutoff points" found were lower than those established in previous studies, both in hysteresis ($\text{VCe} - \text{VCi} = 378$ ml; GINI index = 0.792) and in RI-ratio (0.335; GINI index = 0.756).

Conclusion: The clinical methods used for evaluating recruitment potential were accurate and can be clinically applied to estimate recruitment potential in patients with severe ARDS, although the cutoff points found were lower than those described in previous studies.

Implications: Patients who could benefit from ARM may be incorrectly classified as non-recruitable, which could lead to the omission of the maneuver, even when rescue of severe refractory hypoxemia is necessary. This could hypothetically contribute to a reduction in morbidity and mortality and promote better clinical outcomes in this heterogeneous syndrome.

Keywords: ARDS, PEEP, methods of assessing, alveolar recruitment

Conflict of interest: The authors declare no conflict of interest.

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DEVELOPMENT OF A CORE SET FOR CHAGAS DISEASE: EXPLORING PATIENT PERSPECTIVES ON FUNCTIONALITY

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Background: The Core Set of the International Classification of Functioning, Disability, and Health (ICF) is the methodological process that allows for the definition of categories representing a set of functional outcomes related to a specific health condition. To validate a Core Set for Chagas Disease (CD), a qualitative study was conducted to understand the functional perspectives of this population. **Objectives:** Based on focus groups, this qualitative study represented the second stage in creating the Core Set and aims to list candidate categories that will be analyzed in subsequent phases.

Methods: The focus groups were conducted to identify the most relevant categories for adults of both sexes diagnosed with the cardiac form of CD, related to the functional consequences of the disease. Significant concepts were identified from the transcriptions using the condensation method. Subsequently, the concepts that emerged from the participants' statements were linked to ICF categories by two independent researchers.

Results: Sixteen adults (mean age: 67 ± 8 years), including 10 women and 6 men, participated in six focus groups. A total of 180 relevant concepts were identified, which were mapped to 41 of the 125 second-level categories from the ICF checklist. The identified concepts represented all ICF components: Body Functions (43% of concepts), Body Structures (7% of concepts), Activities and Participation (26% of concepts), and Environmental Factors (24% of concepts). The most frequently mentioned categories were: b134 (Sleep functions), b152 (Emotional functions), b280 (Pain), d930 (Religion and spirituality), and e310 (Immediate family). Patients with CD experienced a complex condition where sleep functions, emotional functions, and the presence of pain are interrelated, creating a significant impact on their quality of life.

Conclusion: The use of religious practices and the support of the immediate family appear to be important resources in managing these conditions.

Implications: The identified categories will be added to the list of candidate categories for reaching a consensus on a Core Set of the ICF for individuals with CD.

Keywords: ICF, validation studies, Chagas disease

Conflict of interest: The authors declare no conflict of interest.

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ASSOCIATION BETWEEN FUNCTIONAL DISABILITY, PHYSICAL PERFORMANCE, AND SOCIAL PARTICIPATION IN PEOPLE WITH INTERSTITIAL LUNG DISEASE: PRELIMINARY RESULTS

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