

# Protocolized weaning from mechanical strategy in chronic obstructive pulmonary disease: respiratory therapists versus physician directed – who guides best?

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## Dear Editor,

Weaning from mechanical ventilation is a complex process that is essential to start as soon as possible in chronic obstructive pulmonary disease (COPD) to avoid infectious and non-infectious complications during endotracheal intubation (1). Currently, 25% of the weaning processes are named as difficult weaning (1). In this complex scenario, evaluation and impact of non-protocolized versus protocolized weaning methods on the duration of mechanical ventilation and weaning, intensive care unit (ICU) stay, successful weaning and mortality are still unresolved questions.

We have read with great interest, study by Kirakli *et al.* (2) that aims to clarify the impact of weaning protocols in COPD patients. Although this original study offers interesting results, in order to increase its scientific value, answers to some questions must be included into the article for a proper extrapolation.

First, we believe that the weaning protocol used in this study must be administered with different medical teams and additionally, on the account of the study design itself; the groups could not be fully comparable. Furthermore, regarding methodology and design and power analysis of the study, authors describe a prospective study but include data collected retrospectively.

Second, underlying diseases associated with COPD, previous ICU admissions and quality of life are crucial points to know as these main factors are determinants on ICU outcome in COPD during weaning from mechanical

ventilation (3).

Third, there is not a clear and homogenous criterion for weaning failure stated by the authors; for example, was non-invasive mechanical ventilation used as preventive or therapeutic therapy after extubation? In this regard, authors state that the subgroup of COPD patients needed non-invasive mechanical ventilation (NIMV) following extubation, but they do not give any data on the fulfilling the criterion for NIMV application and response to it in terms of secretions, inefficacy of cough and etc (4). We consider that evaluation of NIMV in this weaning protocol described could reinforce practical implications in prolonged mechanical ventilation (5).

We consider that further prospective randomized multicenter studies need to evaluate these results and impact of specific weaning protocols that influence on prolonged mechanical ventilation in COPD.

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