

## Psychological dependence to mechanical ventilation

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In the last 50 years, medicine in intensive care units has focused in improving quality and safety processes involved in the attention of critically ill patients, and reducing co-morbidities associated with these units. This goes beyond offering new treatments or drastic and innovating changes in the intervention of these conditions. (1)

Methods and ways in which these processes are carried out, have become crucial points of the assessment in patient care.

We are referring to psychiatric disorders frequently associated with critically ill patients, out of which delirium is the most studied one. However, depression and anxiety will also often be present, resulting in an extended hospital stay and/or complications.

Mechanical ventilation is an immediate synonym of anxiety, just like it's also a necessary treatment for patients with respiratory distress, frequently used in intensive care units. When the critically ill patient's basal condition that led them to need said support, has improved, its withdrawal, also necessary, turns into another problem to take into account, and a number of complications may arise in the process. (2)

One of the aspects, long evaluated, has been ventilator weaning, of which much has been talked about, and different approaches for its achievement have been proposed, as well as the measurement of pulmonary function tests, in order to ensure a successful extubation.

The main determinants of the outcome of weaning include the adequacy of pulmonary gas exchange, respiratory muscle function and psychological problems. (3)

The following case report published by Sathe et al. discusses a topic that hasn't been evaluated and

studied assiduously: psychological dependence of mechanical ventilation.

Failure to wean off mechanical ventilation due to psychological factors can occur in up to 20-30% of patients with prolonged mechanical ventilation. (4) Delirium, a common base for agitation needs to be corrected to reach a favorable outcome. (5)

In the context of critically ill patients, we mustn't forget or fail to take into account the environment in which the patient is in. If the intensive care unit where the patient is hospitalized in has established measures to prevent or avoid delirium, analgesia protocols, early detection of depression, among other evaluations and identification of psychiatric disorders, the incidence of such dependency can be significantly reduced.

Not enough objective evidence is available concerning this perspective in patients with mechanical ventilation, as it is "part of the treatment" and patient's perception isn't always considered. Sometimes, it is not only the patients, but also the family members who will need assistance in dealing with stressful situations, false beliefs, anxiety and all the other emotions linked to this process. (6)

There are several tools that could be used, ranging from the use of anxiolytic therapies to antidepressants antipsychotics, besides the identification and removal of the triggering or favoring factor of this disease. Also, using an algorithm that combines psychological evaluation, including all the mechanical factors will ensure a successful weaning. Identification and management of the patient's problem should improve and diminish ventilator dependency, and a protocol to accurately perform the weaning process should be established.

**Key words:** Mechanical ventilation, psychological, dependence.

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