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EDITORIAL

Yes to mechanical ventilation, but not just any☆

Ventilación mecánica sí, pero no de cualquier forma

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Mechanical ventilation (MV)–both invasive through the endotracheal tube or tracheostomy, and noninvasive through different interfaces–is a life support technique with the potential to save many lives, though it is not without potentially fatal complications.[1] Recent reports even indicate that the inadequate use of ventilation techniques can worsen possible existing lung injury in spontaneously breathing patients in which an excessive increase in respiratory effort can result in augmented transpulmonary pressure.[2] This suggests that there are even further indications of MV which should be considered on an earlier basis–even from the out-hospital setting[3]–than is done today.

Due to its efficacy in different disease conditions such as heart failure or the exacerbation of chronic obstructive pulmonary disease, and its potential use in other disorders such as acute respiratory failure in out-hospital pneumonia, as well as the availability of respirators in emergency care units (affording increasingly improved performance), the indications of noninvasive mechanical ventilation (NIMV) are becoming increasingly widespread. However, such increased need should not result in inadequate application of these techniques[4]; indeed, their use in the emergency care setting is not uniform, due to the heterogeneity of emergency care physician preparation in the use of such techniques, which require adequate learning and training.[5]

In this number of the journal, Jacob et al.[6] present the results of a descriptive study comprising a structured questionnaire, with the aim of analyzing the use of NIMV in the Emergency Care Departments of public hospitals in Catalonia. Their results show that 96% of the Departments use NIMV, which in 78% of the cases is started by emergency care physicians–with an incidence of 43% of the cases in which admission lasts over 24 h. The authors indicate that only 39% of the Departments have a protocol of their own, while 35% use a protocol that has been established by consensus with other Departments–this being more common in district hospitals, with consensus generally being established with the Department of Intensive Care Medicine. On the other hand, 25% of the Departments were seen to lack a protocol for the use of NIMV.

In our opinion, this study offers the great advantage of providing a real-life view of the situation, beyond the clinical trial setting, which sometimes does not reflect routine clinical practice. A particularly interesting finding of this study is the description of important shortcomings in training in this field, with no important presence of protocolized training in NIMV. This is particularly relevant, since NIMV is encompassed within the knowledge, skills and techniques required by professionals working in emergency care, contemplated in the training programs of the Spanish Society of Urgencies and Emergency Care Medicine (*Sociedad Española de Medicina de Urgencias y Emergencias* [SEMES]).[7] The authors suggest strategies for improvement that include collaboration among Departments and adequate training

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of the professionals in charge of the care of these patients.

We feel that the application of MV should be optimized from the out-hospital emergency scenario to the Departments of Intensive Care Medicine. This technique must be correctly applied in all settings in order to obtain the best outcomes, and in this regard we consider it essential to ensure collaboration to ensure adequate training of the different professionals involved (not only physicians but also nursing staff), the development of common protocols, and inter-professional communication systems allowing definition of the best strategy for each individual indication and patient.[8] Such efforts would serve to identify individuals at high risk of NIMV failure[9] in which invasive ventilation may be implemented from the start; ensure adequate monitoring; and favor decision making and the analysis of the outcomes on a joint basis.

We all must ponder this issue, since segmented or parceled care in which the patient is not really central to the process and is unable to benefit from coordinated and sufficiently qualified professional activity cannot be regarded as acceptable. The truly important issue is not whether to ventilate the patient or not, but to ensure that ventilation is provided adequately and safely.

We consider the relationship between the Departments of Intensive Care Medicine and Emergency Care to be very important, particularly in district hospitals such as those addressed by this study. This model of relationship undoubtedly offers great benefits for patients and allows rational and effective use of the available resources.[10,11]

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