

The latter, for instance, can impact on the inhalation technique, impeding the correct use of devices and influencing diagnostic accuracy.

Moreover, while comorbidities have been recognized as a major factor in the management of COPD patients, additional problems such as dementia, including early-stage disease, must be taken into account in the elderly. Exacerbations are associated with cognitive impairment, and can even be a key factor in destabilizing a patient, tipping the scales toward a diagnosis of acute confusional state or dementia.² The significant comorbidity burden in this population means that polypharmacy is almost unavoidable, and this increases the risk of pharmacological iatrogeny in an already vulnerable population. Deprescription, the use of corticosteroids and their side effects, and the need for a simpler approach to high blood sugar are some of the aspects that must be addressed in future consensus documents.

A very important factor that must also be taken into account is the concept of frailty. The prevalence of frailty and pre-frailty in this population has been reported in some studies to be 6.6% and 41.3%, respectively.³ These figures in themselves reflect the importance of detecting this clinical characteristic in order to provide early intervention.⁴ Closely linked to the concept of frailty is the concept of functionality. Conventional models are based on the quantitative and qualitative evaluation of diseases, and focus mainly on this paradigm. However, this old-fashioned system of approaching medicine on the basis of isolated diseases has become outdated.⁵ The health of elderly individuals must be measured in terms of function and not disease, since functionality is the parameter that determines life expectancy and quality of life, and the support and resources that our patients will require, and is one of the best indicators of health status and a predictor of adjuvant disability.

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Non-Invasive Ventilation in Non-COPD Subjects With Pneumonia: Benefits and Potential Complications[☆]



¿Ventilación no invasiva en pacientes con neumonía sin EPOC? Efectos beneficiosos y aspectos a tener en cuenta para evitar potenciales complicaciones

To the Editor,

Non-invasive mechanical ventilation (NIV) is a common treatment option, but its use in patients with severe acute pneumonia (SAP) admitted to an intensive care unit (ICU) is controversial.¹ Rapid detection of any signs of failure is essential after applying appropriate first-line NIV in carefully selected patients, since delay in performing endotracheal intubation (ETI) is a factor for increased mortality.²

We read with great interest the study of Rialp et al.³ on the use of NIV in patients with SAP but without chronic obstructive pulmonary disease (COPD). However, we believe that some key aspects need to be clarified, due to the practical implications associated with the interpretation and potential application of their findings in routine practice.

Firstly, the interpretation of PaCO₂ values in non-COPD patients is controversial. The authors report that PaCO₂ was higher in patients treated with first-line NIV than in those who received first-line invasive mechanical ventilation (MV). This bias is unclear, and in our opinion, it is difficult to conclude that none of the study patients included in this study had COPD purely on the basis of symptoms of dyspnea, chronic cough, and expectoration, since spirometric data are essential to establish a diagnosis of COPD. We believe then that other factors must be taken into account that might possibly explain the hypercapnia values in both groups.⁴

Useful key points to consider may be that these higher PaCO₂ values were due to variations in the time of starting NIV in the ICU, the types of devices and ventilatory modes used, the criteria used for performing ETI, bicarbonate levels, and associated comorbidities, among others. These variables were not fully reported in the study, and may clarify the high rate of failure of NIV compared to other studies.¹

Secondly, the speed of the decision to perform ETI is a key factor in therapeutic response. We consider a delay of 22 h before ETI to be very high, and this may have resulted in the higher mortality and response to invasive MV.

Thirdly, the authors consider that NIV failure was associated more with a situation of shock and worse response to NIV, but this topic is controversial and, as shown in a recent European survey, the use of NIV is not absolutely contraindicated and first-line ETI may confer a higher risk.⁴

Finally, we do not know if the authors found an improvement in NIV outcomes after 10 years of use, as reported in other series,⁵ so

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we conclude that further studies are necessary to confirm the role of NIV in non-COPD patients with hypercapnia.

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