

Ketamine Sedation for Noninvasive Ventilation in Distressed Elderly Patients with Acute Decompensated Heart Failure: Is it Safe?

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Dear Editor,

Sedation plays a critical role to improve patients' tolerance to mechanical ventilation. In this line, the article by Verma et al. describes sedation with great interest.¹ We consider that ketamine may be an attractive drug for adaptation to noninvasive ventilation (NIV). However, other aspects that may limit its usefulness in an elderly patient with acute decompensated heart failure should be examined.

The first critical aspect that needs consideration is the pharmacokinetics and pharmacodynamics of ketamine in elderly patients. Ketamine, even in a dose of 0.3 mg/kg, causes cognitive dysfunction in the elderly.² Even with a minimal dose, it can affect the control of the respiratory center, leading to apnea.³ Ketamine also depresses the laryngeal reflex, causes sympathetic stimulation, and has psychotomimetic effects.^{4,5} The inability to reverse these effects are essential aspects that need to be thought before choosing it for such patients. As the effect of ketamine in the elderly is not well-predictable, the possibility of abolishing the protective airway response in such patients even with subanesthetic doses cannot be denied, which may be hazardous in patients on NIV. The other aspect of ketamine use in the context case that needs cogitation is the safety in heart failure as it can also induce or precipitate heart failure.⁶

Therefore, if ketamine is used, it is indispensable that device setting and programming in context to the risk of hypoventilation or apnea need attention to detail. We believe that the authors must have done so, still, the information in these aspects will help the readers in better planning and management. The present report opens up an inquest, despite all odds against it, and further studies will be required before we can advocate this drug in such situation for NIV.

Thanking you and the Authors.

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