



Letter to the Editor

Morphine therapy in acute heart failure is associated with increased mechanical ventilation and mortality: Adverse dose-dependent effect or inevitable consequence?

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We read with great interest the article by Caspi et al. [1] where the association of morphine therapy on the first day of hospitalization was analyzed with the prognosis in acute heart failure patients. Association of Morphine therapy with increased mortality has conflicting results, and in spite of poor scientific background, it is still in use [2]. We congratulate the authors for their relevant study with propensity score matched analysis. However, we believe that the increased need for invasive and noninvasive ventilation is needed to be argued from other perspectives as well.

Firstly, the authors do not take into account the baseline and changes in gas exchange, especially the level of hypoxemia, which is a determining factor in the symptoms as well as the severity of the same. This aspect is also important while considering the use of noninvasive or invasive mechanical ventilation [3,4].

Secondly, the criteria for the initiation of noninvasive ventilation are not determined in the study. Previous studies indicate that there may be

variability in their use [5], and the same may have affected the outcome of this study.

Finally, with in-hospital mortality of 88 out of 672 in the no morphine group and 117 out of 672 in the morphine group, the difference although statistically significant has a power of only 52.8% for a type-I error of 0.05. As delayed intubation, mechanical ventilation and their subsequent management, and the severity of the acute heart failure itself can act as confounding factors, and affect the mortality, this statistically significant difference needs to be analyzed and interpreted in context to these factors too. Therefore, we believe that future randomized controlled trial will still be necessary.

Declaration of Competing Interest

The authors report no relationships that could be construed as a conflict of interest.

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