

reduction in heart rate during hospitalization was associated with greater survival, for which reason reaching a target heart rate range is an ideal therapeutic objective for patients with acutely decompensated HF [14]. Short-term treatment with carvedilol at doses that induce comparable heart rate reductions has superior hemodynamic and metabolic effects compared with selective beta-blockers such as metoprolol CR/XL. These data suggest important advantages of blocking all three adrenergic receptor subtypes [22]. In this study, we observed that both beta-blockers, carvedilol, and nebivolol, managed to compensate the patients in this study group, mainly translated into an improvement in the NYHA functional class and a decrease in signs of congestion, which raises possible important clinical benefits attributable to these drugs. in the acute context; for example, greater in-hospital survival, as suggested by a Japanese study that aimed to evaluate the effect of the use of beta-blockers on admission on hospital mortality in 3,817 patients with acute decompensated heart failure, where they demonstrated that the use of beta-blockers on admission was significantly associated with a lower risk of cardiovascular mortality and a lower risk of non-cardiovascular mortality. (4.4% vs 7.6%, $p < 0.001$). (odds ratio, 0.41; 95% CI, 0.27-0.60, $p < 0.001$), in addition, the association of beta-blocker use with a lower risk of hospital mortality was relatively greater in patients receiving high doses of beta-blockers [23]. These findings are consistent with small studies, where the findings are similar, suggesting that progressive and cautious carvedilol titration, in patients still decompensated with sinus rhythm, increases long-term survival [24].

LIMITATIONS

We recognize limitations in terms of sample size, explained by a prospective study design dependent on the incidence of this clinical entity in our environment and the low influx of patients to our emergency room, possibly explained by the fear of the population. in the context of the COVID-19 pandemic. In addition, various pre-specified exclusion criteria were considered that limited the inclusion of a large number of patients in the study. This research was also limited by a greater predominance of male patients, we do not know if the findings found would have similar behavior in a more gender-balanced study group.

CONCLUSION

The results of this study demonstrate the clinical benefit of the use of beta-blockers in the context of heart failure with acutely decompensated. Its use is safe and well tolerated, without significant adverse effects attributable to these drugs, which allows improvement of clinical variables and rapid compensation at 96 hours, with low doses of diuretics. The results about weight loss were favorable with the use of carvedilol compared to nebivolol, with no other relevant differences between the two beta-blockers. More research will be needed to confirm these findings.

DECLARATIONS

Conflict of Interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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