Letter to Editor Optimal ivabradine therapy in patients with acute decompensated heart failure

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Ivabradine, an agent for reducing heart rate through the inhibition of the I, current in the sinoatrial node, has demonstrated efficacy in reducing mortality and morbidity in patients suffering from compensated chronic heart failure with reduced ejection fraction (HFrEF) [1]. Abdelnabi and colleagues conducted a retrospective investigation into the impact of ivabradine on the morbidity and mortality of hospitalized patients experiencing acute decompensated heart failure [2]. The results showed that Ivabradine led to a reduction in heart rate and a decrease in the length of hospital stays. However, it did not manifest any discernible advantage concerning the reduction of re-hospitalization rates and short-term mortality.

Ivabradine exhibits credible evidence in terms of improving clinical outcomes for patients with HFrEF. Nevertheless, its clinical utility in the context of heart failure with preserved ejection fraction (HFpEF) remains a subject of controversy [3]. Recent studies suggest that aggressive interventions to lower heart rate may, paradoxically, be detrimental in this patient cohort, as it could diminish cardiac output. In the authors' study, it seems that patients with HFpEF, who may not be ideal candidates for ivabradine therapy, were included [2].

It should be noted that all participants in the authors' study received beta-blockers [2]. The administration of beta-blockers is generally not advised for patients with HFpEF unless there are specific indications, such as the need for rate control in cases of atrial fibrillation. The authors are encouraged to elaborate on the rationale behind the inclusion of beta-blockers for patients with HFpEF.

In the authors' study, some patients, particularly those with HFpEF, may have exhibited paroxysmal atrial fibrillation. The presence of atrial fibrillation is considered one of the risk factors associated with adverse clinical outcomes in heart failure patients and should be duly considered.

The baseline heart rate in the authors' study was approximately 90 beats per minute [2]. While the optimal heart rate for patients with acute heart failure remains uncertain, our team has proposed a novel methodology for estimating the ideal heart rate [4]. This method involves referencing trans-mitral Doppler echocardiography findings in patients with chronic HFrEF. At the ideal heart rate, both the E-wave and A-wave should align without any overlap. We would appreciate further details regarding the extent of overlap observed in the transmitral Doppler echocardiography data within the authors' patient cohort.

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