Effect of Antiplatelet Medications on Critically Ill Patients with Pre-existing Atrial Fibrillation

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Introduction: Limited data was found about the usage of antiplatelet medications on patients who previously diagnosed with atrial fibrillation (AF), and were critically ill and admitted to stepdown care unit (SDU) due to other acute conditions. Our goal to clarify the effect of antiplatelet medications on the adverse events (i.e., transfer to intensive care unit (ICU) or death), and the influence of the associated clinical factors.

Method: A retrospective cohort study was conducted on previously diagnosed AF patients, that were admitted to SDU. The exposure was the use of antiplatelet medications, and the primary composite outcome was the transfer to ICU or death.

Results: A total of 1430 patients were included, in which 198 (13.9%) had the primary outcome, the exposed group was less likely to report the outcome than the unexposed group, 10% and 16% respectively (P= 0.001). Univariate logistic regression showed a statistically significant association between the usage of antiplatelet medications and the decreased primary outcome (OR: 0.57, 95% CI:0.41-0.79, P=0.001). The multivariate logistic regression was adjusted for other factors, the association was still statistically significant (OR: 0.50, 95% CI:0.32-0.77, P=0.002), and had less odds to report the main outcome in antiplatelet medications group.

Conclusion: Among the critically ill SDU patients who previously diagnosed with AF, and admitted due to other acute conditions, and who were treated with antiplatelet medications, less likely to be associated with adverse events (transfer to ICU or death) by approximately 50%.

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