Left Atrial Appendage Occlusion vs Oral Anticoagulants in Atrial Fibrillation and Coronary Stenting. The DESAFIO Registry

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Abstract: Background and objectives: The treatment of patients with non-valvular atrial fibrillation (NVAF) who need coronary stenting is challenging. The objective of the study was to determine whether left atrial appendage occlusion (LAAO) could be a feasible option and benefit these patients. To this end, we studied the impact of LAAO plus antiplatelet drugs vs oral anticoagulants (OAC) (including direct OAC) plus antiplatelet drugs in these patients' long-term outcomes. Methods: The results of 207 consecutive patients with NVAF who underwent coronary stenting were analyzed. A total of 146 patients were treated with OAC (75 with acenocoumarol, 71 with direct OAC) while 61 underwent LAAO. The median follow-up was 35 months. Patients also received antiplatelet therapy as prescribed by their cardiologist. The study received the proper ethical oversight. Results: Age (mean 75.7 years), and the past medical history of stroke were similar in both groups. However, the LAAO group had more unfavorable characteristics (history of coronary artery disease [CHA2DS2-VASc], and significant bleeding [BARC ≥ 2] and HAS-BLED). The occurrence of major adverse events (death, stroke/transient ischemic events, major bleeding) and major cardiovascular events (cardiac death, stroke/transient ischemic attack, and myocardial infarction) were significantly higher in the OAC group compared to the LAAO group: 19.75% vs 9.06% (HR, 2.18; P = .008) and 6.37% vs 1.91% (HR, 3.34; P = .037), respectively. Conclusions: In patients with NVAF undergoing coronary stenting, LAAO plus antiplatelet therapy produced better long-term outcomes compared to treatment with OAC plus antiplatelet therapy despite the unfavorable baseline characteristics of the LAAO group.

Keywords: stents, atrial fibrillation, anticoagulants, left atrial appendage occlusion

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