

**ANEMIA PREDICTS MORTALITY IN ATRIAL FIBRILLATION PATIENTS UNDERGOING LEFT ATRIAL APPENDAGE OCCLUSION USING WATCHMAN DEVICE**

Poster Contributions
Poster Hall, Hall C
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Session Title: Structural Heart Interventions: Focus on Mitral Valve, Left Atrial Appendage and HOCM
Abstract Category: 24. Interventional Cardiology: Mitral and Structural Heart Disease
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Background: Anemia is associated with mortality and poor outcomes in patients with cardiovascular disease undergoing interventional procedures, including percutaneous coronary intervention, transcatheter aortic valve implantation, and percutaneous mitral valve repair. In patients with atrial fibrillation (AF), anemia is a predictor of adverse cardiac events. However, the impact of anemia on the outcomes in the patients receiving the WATCHMAN device has not been determined.

Methods: A retrospective single center study was conducted in 159 consecutive AF patients who underwent successfully LAA closure using WATCHMAN device between September 2006 and July 2015. Anemia was defined as a baseline hemoglobin level of <12 g/dL for women and <13 g/dL for men. The clinical outcomes were compared between patients with or without anemia.

Results: Anemia was found in 52 patients (33%). Anemic patients were older, had higher incidence of diabetes, coronary artery disease, prior percutaneous coronary intervention, prior major bleeding events, had higher scores in CHA₂DS₂-VASc and HAS-BLED, and had worse kidney function. At median follow-up time of 32 months (interquartile range 15 to 61 months), anemic patients showed a greater mortality rate (33% vs 10%, p=0.001). No differences were observed in the rate of stroke, and overall or major bleeding events between groups. A multivariate regression analysis showed that anemia was independently associated with all-cause death (hazard ratio 5.03, [95% CI 1.96-12.90], p<0.001).

Conclusions: Anemia in AF patients underwent LAA occlusion with WATCHMAN device is strongly related to all-cause mortality during follow-up. Therefore, aggressive management of anemia, with the addition of determining causes of anemia, should be considered for the patients.