

## ASSOCIATION BETWEEN PSYCHOSOCIAL FACTORS, QUALITY OF LIFE AND ATRIAL FIBRILLATION

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**Background:** Atrial fibrillation (AF) is associated with cognitive and psychosocial comorbidities, and poorer quality of life (QOL). In this study, we aimed to study the association between cognition, psychosocial status and QOL at baseline and AF recurrence.

**Methods:** We enrolled 222 symptomatic AF patients (64±10.0 years, 36% women) treated with a rhythm-control strategy. We performed cognitive, psychosocial, and QOL assessments using Montreal cognitive assessment (MOCA, cognitive impairment <26), generalized anxiety disorder assessment (GAD; anxiety ≥5), patient health questionnaire-9 (PHQ-9, depression≥5), and the AF Effect on QualiTY- of- Life (AFEQT) questionnaire respectively. AF recurrences were assessed for 6 months from the enrollment using validated methods from patient self-report and health record review. Multivariable logistic regression models were used to examine associations between cognition, anxiety, depression, and QOL at baseline with AF recurrence, adjusting for age, sex, and AF treatment type (catheter ablation vs. pharmacotherapy).

**Results:** A total of 123 (55%) participants experienced an AF recurrence over the 6-month follow-up period. Participants with an AF recurrence had higher rates of depression (31% vs.14%,  $p=0.022$ ) and lower QOL (62±24 vs. 72±21,  $p=0.003$ ) at baseline than did participants free from recurrence. In multivariable logistic regression models, lower baseline QOL, but not depression, anxiety, or cognition, was associated with a significantly higher odds of AF recurrence event (Odds Ratio: 0.98, CI 0.97-0.99).

**Conclusion:** Lower AF-related QOL is associated with higher odds of AF recurrence over 6 months among symptomatic AF patients treated with rhythm control. Patient-reported variables have not previously been considered as risk factors for disease progression or prognosis. Our data suggests QOL may serve as a useful tool to aid clinicians in the management of AF patients.

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