

# Improvement of the Quality of Life by Catheter Ablation for Atrial Fibrillation in Patients undergoing Hemodialysis

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## Abstract

Introduction: Atrial fibrillation (AF) is the most common arrhythmia in patients undergoing hemodialysis (HD), which lowers the quality of life (QoL) and increases the risk of dialysis related complications. The present study aimed to evaluate the effectiveness of AF ablation on the QoL in patients undergoing HD. Methods and Results: Nineteen patients undergoing HD (14 men, age 68±8years, 15 paroxysmal AF) who underwent catheter ablation (CA) of drug-refractory AF were enrolled in the study. The ablation outcomes and procedural complications were evaluated and compared to 1053 consecutive patients without HD who underwent AF ablation. The Kidney Disease Quality of Life Short Form (KDQOL-SF) was assessed to evaluate the QoL of the HD patients at baseline and six months after the ablation. During the follow-up period of 17±13 months after the last procedure, the arrhythmia free rate was similar (HD patients 79% vs. non-HD patients 86%, log-rank p=0.82). There were no life-threatening complications in any patients. The KDQOL-SF of the HD patients six months after the ablation showed an improvement in the physical functioning (54±23 to 68±28, p<0.01), general health perceptions (38±17 to 48±15, p<0.01) and symptoms/problems (75±21 to 84±13, p=0.02) as compared to the baseline. Regarding the intradialytic symptoms, the dyspnea during HD significantly improved after the CA in the HD patients without AF recurrence (35% to 6%, p=0.04), while the atrial tachyarrhythmias and hypotension during HD remained unchanged. Conclusions: CA of AF improves the QoL in patients with chronic hemodialysis.

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