

SP061

### EFFICACY AND SAFETY OF PERCUTANEOUS LEFT ATRIAL APPENDAGE CLOSURE IN CHRONIC KIDNEY DISEASE PATIENTS WITH ATRIAL FIBRILLATION: RESULTS OF A 7-YEAR REGISTRY

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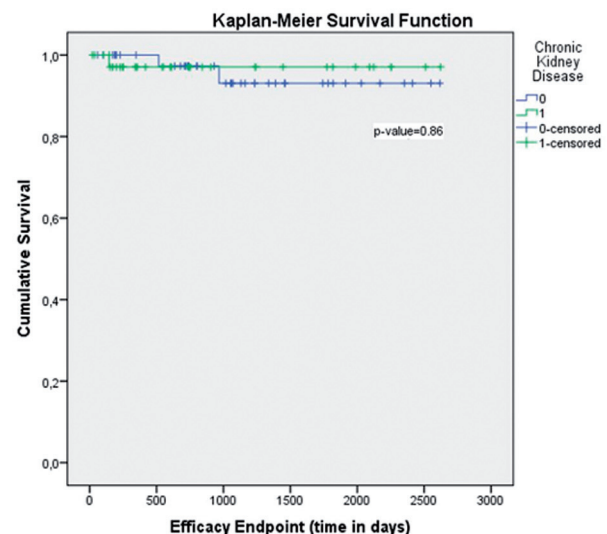
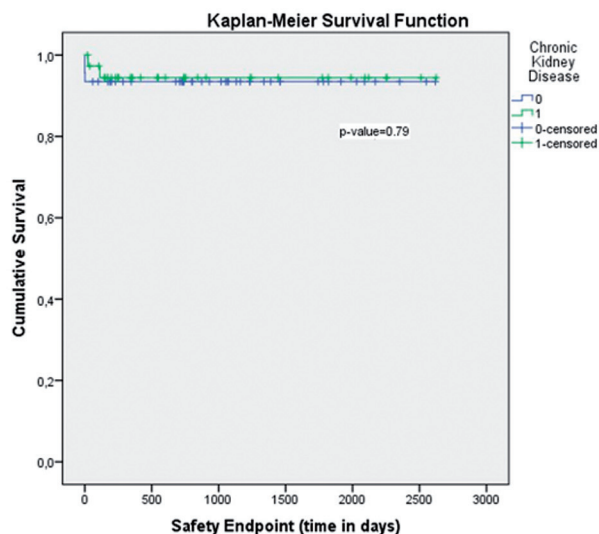
**INTRODUCTION AND AIMS:** Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia, the most devastating complication being thromboembolism leading to fatal or disabling stroke. Although oral anticoagulation (OAC) is the mainstay of prevention therapy in the general population, its benefit in chronic kidney disease (CKD) patients is less well defined. End-stage renal disease patients treated with vitamin K antagonists present increased risk of bleeding, accelerated cardiovascular calcification and increased risk of calciphylaxis. Left atrial appendage closure (LAAC) is performed to prevent complications in high-risk AF patients with contraindications to OAC and in AF patients with events despite OAC.

**AIM:** To evaluate the efficacy and safety of LAAC in CKD patients with AF.

**METHODS:** Single-center registry of consecutive patients submitted to percutaneous LAAC. All patients underwent a standardized clinical follow-up. The procedure details, complications, CHA<sub>2</sub>DS<sub>2</sub>-VASC and HAS-BLED scores were registered. We used the PROTECT-AF trial efficacy composite endpoint defined as the occurrence of stroke, cardiovascular death or systemic embolic events, and the same trial's composite safety endpoint defined as the occurrence of procedure-related complications and major bleeding events. CKD patients were defined as patients with estimated glomerular filtration rate below 60 ml/min/1.73 m<sup>2</sup> (using chronic kidney disease epidemiology collaboration equation). Statistical analysis included Mann-Whitney U test, chi-square test, Cox univariate analysis and Kaplan-Meier survival analysis.

**RESULTS:** 92 patients were included (mean age 73 ± 7 years, 59 male patients, 39 CKD patients). CKD patients presented statistically significant higher age (mean age 75 ± 6 vs 72 ± 7; p=0.02), higher CHA<sub>2</sub>DS<sub>2</sub>-VASC score (mean score 4.7 ± 1.3 vs 3.9 ± 1.3; p=0.007) and higher HAS-BLED score (3.6 ± 0.7 vs 3.2 ± 0.8; p = 0.047) than non-CKD patients. During a mean follow-up of 959 ± 752 days, there were 3 strokes in 3 patients (1 CKD patient; 2 non-CKD patients), 7 deaths (all non-cardiovascular) and no additional systemic embolic events. Thus, the primary efficacy endpoint occurred in 3 patients. Considering the primary safety endpoint, there were 3 pericardial tamponades and 2 major bleeding in 5 patients (2 CKD patients, 3 non-CKD patients). Thus, the primary safety endpoint occurred in 5 patients. The presence of CKD did not predict the occurrence of the efficacy endpoint (p = 0,86) nor safety endpoint (p = 0,79) using Cox univariate analysis. There were no statistically significant differences between CKD and non-CKD patients regarding either safety (Log Rank 0.065, p=0.79) or efficacy endpoints (Log Rank 0.03, p =0.86).

**CONCLUSIONS:** Percutaneous LAAC in CKD patients presented, in our cohort, similar outcomes to non-CKD patients. The procedure can be considered as a treatment option in this population.



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