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 Arrhythmias and Clinical EP**RISK STRATIFICATION SCORING PREDICTS MORTALITY IN DIALYSIS PATIENTS WITH ATRIAL FIBRILLATION**

Poster Contributions

Hall C

Saturday, March 29, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Arrhythmias and Clinical EP: Advances in Stroke Risk Stratification for Patients with Atrial Fibrillation

Abstract Category: 4. Arrhythmias and Clinical EP: AF/SVT

Presentation Number: 1143-113

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**Background:** The CHA2DS2VASc score predicts stroke occurrence and mortality in atrial fibrillation (AF) patients. AF and End Stage Renal Disease (ESRD) share many risk factors including heart failure, hypertension, and diabetes. Patients with ESRD and AF may exhibit some or all of these risk factors, suggesting that CHA2DS2VASc may have particular utility in this group. To test this question, we queried the United States Renal Data System (USRDS) for rates of mortality and AF in incident dialysis patients, and correlated these events with the CHA2DS2VASc score.

**Methods:** All incident adult hemodialysis cases from the USRDS for 2005-2008 were queried for a diagnosis of all-cause mortality, AF or flutter, and individual parameters from the CHA2DS2VASc score using ICD-9 diagnosis codes and data from CMS form 2728. The CHA2DS2VASc score before death or until the last date of service was calculated for each patient. Logistic regression was used to estimate the odds ratio of the CHA2DS2VASc score on all-cause mortality, accounting for number of patient-years and controlling for anticoagulation therapy.

**Results:** We reviewed 443,890 incident dialysis patients between 2005-2008. There were 35,147 patients with a diagnosis of AF or flutter, of whom 83% were white, 14% black, 3% other, 42% female, and the mean age was 75.4 years. After adjustment for anticoagulation therapy and dialysis type, the odds ratio for all cause mortality increased by 1.21 for every one-unit increase in CHA2DS2VASc.

**Conclusions:** The CHA2DS2VASc score correlated with all-cause mortality in patients with AF or flutter undergoing dialysis. Dialysis patients, often with multiple risk factors, have a significant risk for mortality; the CHA2DS2VASc scoring system may be of utility in predicting mortality in this patient population.