



Vascular Medicine

THE ADDITION OF RENAL IMPAIRMENT TO THE CHA2DS2-VASC SCORE AS A PREDICTOR OF THROMBOEMBOLISM AND MORTALITY IN PATIENTS WITHOUT ATRIAL FIBRILLATION

Moderated Poster Contributions

Vascular Medicine Moderated Poster Theater, Poster Hall, Hall C
Friday, March 17, 2017, 11:15 a.m.-11:25 a.m.

Session Title: Highlights in Vascular Medicine Research

Abstract Category: 38. Vascular Medicine: Basic

Presentation Number: 1139M-13

Authors: *Christine Parsons, Stephen Cha, Win-Kuang Shen, Santosh Desai, Salma Patel, Alanna Chamberlain, Sushil Allen Luis, Maria Aguilar, Bart Demaerschalk, Farouk Mookadam, Fadi Shamoun, Mayo Clinic, Scottsdale, AZ, USA, Mayo Clinic, Rochester, MN, USA*

Background: Research is conflicting whether kidney function should be incorporated in thromboembolism risk prediction. Our recent study showed that the CHA2DS2-VASc score predicts thromboembolism and mortality in those without atrial fibrillation. We evaluate if the addition of renal impairment is predictive.

Methods: We used the Rochester Epidemiology Project medical records system from 1/10/04 - 3/7/16 to retrospectively evaluate whether adding renal impairment (1 point) to the CHA2DS2-VASc score (-R) predicts mortality, thromboembolism, and atrial fibrillation in patients without atrial fibrillation. Score groupings were chosen based on similar hazard ratios (HR). Renal impairment was defined as chronic kidney disease stage III or greater. An implantable device was required to discern the absence of atrial fibrillation.

Results: The population (n=1,606) had a mean age of 69.8 years and median follow-up of 4.8 years. Mortality, thromboembolism, and incident atrial fibrillation correlated significantly with increasing CHA2DS2-VASc-R score (Figure 1). Baseline renal impairment was predictive of mortality (HR 2.06, 95% confidence interval (CI) 1.64-2.60, p<0.001), thromboembolism (HR 1.34, 95% CI 0.96-1.87, p=0.09), and atrial fibrillation (HR 1.31, 95% CI 0.98-1.74, p=0.07).

Conclusions: Adding renal impairment to the CHA2DS2-VASc score predicts mortality and there is a trend towards predicting atrial fibrillation and thromboembolism in a population without atrial fibrillation.

