IDENTIFICATION OF ACTIONABLE ATRIAL FIBRILLATION USING AN INTEGRATED CARDIOVASCULAR SCREENING APPROACH IN COMMUNITY PHARMACIES

Roopinder K. Sandhu, MD, MPH, FHRS, Bishoy Deif, MD, Walid Barake, MD, Gina Agarwal, MBBS, PhD, Stuart J. Connolly, MD, Lisa Dolovich, PharmD and Jeffrey S. Healey, MD, FHRS.

University of Alberta, Edmonton, AB, Canada, McMaster University, Hamilton, ON, Canada, Population Health Research Institute, Hamilton, ON, Canada

Introduction: Given the effectiveness of oral anticoagulation (OAC) therapy to prevent atrial fibrillation (AF) associated stroke, screening for AF is a promising strategy to prevent stroke at the population level. However, few published studies have evaluated this strategy and none have combined AF screening with other cardiovascular screening initiatives.

Methods: In the Program for the Identification of ‘Actionable’ Atrial Fibrillation: In the Pharmacy Setting (PIAAF-Pharmacy), participants > 65 years old underwent opportunistic AF screening in 30 pharmacies in Alberta and Ontario using a 30 second single-lead ECG device. Each participant also had blood pressure (BP) measurements using a validated BP kiosk, completed the CANRISK diabetes risk questionnaire and provided medication information. ‘Actionable’ AF was defined as previously undiagnosed AF for which OAC would be indicated, or previously recognized AF in patients not receiving OAC. All single-lead ECGs were independently adjudicated by two cardiologists. Uncontrolled BP was defined as an average >140/90 mmHg in those without diabetes and >130/80 mmHg with diabetes.

Results: A total of 1131 participants were screened over a 6-month period. The prevalence of ‘actionable’ AF was 2.4% (95% CI, 1.6-3.5; n=27), of these 2.2% (95% CI, 1.4-3.3; n=25) were newly diagnosed AF. Participants with ‘actionable AF’ had a mean age of 77.6 ± 6.9 years, 55.6% were male and 96.3% had a CHA2DS2-VASc score > 2. An uncontrolled BP was found in 37.0% (10/27) of participants with ‘actionable AF’ and 39.2% (426/1086) with no AF and a history of hypertension while 36.4% (197/541) of screened participants without reported hypertension were found to have a BP > 140/90 mmHg. A high risk for diabetes was found in 25.0% (2/8) of ‘actionable AF’ and 43.5% (208/478) of no AF participants (annual incidence = 33%).

Conclusions: Integrated cardiovascular screening in the pharmacy setting identifies a significant proportion of ‘actionable AF’ and other modifiable stroke risk factors. Comprehensive, community-based screening for stroke risk factors is a promising public health strategy.