

**CONCLUSION** The percentage of patients aged  $\geq 80$  years in LAAC series may significantly affect the incidence of major bleeding beyond that expected according to the HAS-BLED score, due to the high frequency of GI bleeding.

**CRT-700.41**

**Differences in the Percentage of Events Per Patient-year After Left Atrial Appendage Closure. Results of the II Iberian Registry**



Jose R. Lopez-Minguez,<sup>1</sup> Juan Manuel Nogales-Asensio,<sup>1</sup> Eduardo Infante De Oliveira,<sup>2</sup> Vasco De Gama-Ribeiro,<sup>3</sup> Rafael Ruiz-Salmeron,<sup>4</sup> Dabit Arzamendi-Aizpurua,<sup>5</sup> Marco Costa,<sup>6</sup> Hipolito Gutierrez-Garcia,<sup>7</sup> Jose Antonio Fernandez-Diaz,<sup>8</sup> Victoria Martin-Yuste,<sup>9</sup> Juan Carlos Rama-Merchan,<sup>10</sup> Raul Moreno,<sup>11</sup> Fernando Alfonso-Manterola<sup>12</sup>

<sup>1</sup>Hospital Infanta Cristina, Badajoz, Spain; <sup>2</sup>Hospital Santa Maria, Lisbon, Portugal; <sup>3</sup>Centro Hospitalario de Vila Nova de Gaia, Oporto, Portugal; <sup>4</sup>Hospital Virgen de la Macarena, Seville, Spain; <sup>5</sup>Hospital Santa Creu i San Pau, Barcelona, Spain; <sup>6</sup>Centro Hospitalar e Universitario de Coimbra, Coimbra, Portugal; <sup>7</sup>Hospital Clinico de Valladolid, Valladolid, Spain; <sup>8</sup>Hospital Puerta de Hierro, Madrid, Spain; <sup>9</sup>Hospital Clinic de Barcelona, Barcelona, Spain; <sup>10</sup>Hospital Universitario de Salamanca, Salamanca, Spain; <sup>11</sup>Hospital La Paz, Madrid, Spain; <sup>12</sup>Hospital La Princesa, Madrid, Spain

**INTRODUCTION AND OBJECTIVES** Many patients with non-valvular atrial fibrillation (NVAF) are still left without protection due to a contraindication for anticoagulants (OACs). Although closure of left atrial appendage (LAA) can reduce the thromboembolic/bleeding events and mortality in these patients, a better understanding of their natural history is needed. This study aimed to establish the occurrence of stroke and major bleeding events in patients with NVAF and LAA closure with medium (<24 months) and long-term (>24 months) follow-up.

**METHODS** Analysis of a multicenter single cohort prospectively recruited from 2009 to 2015. Thromboembolic and bleeding events were compared with those expected from CHA<sub>2</sub>DS<sub>2</sub>-VASc and HAS-BLED scores and according to follow-up duration. Multivariate analysis examined variables associated with mortality during follow-up.

**RESULTS** A total of 598 patients with a contraindication for oral anticoagulants (OACs) were recruited (median 75.4 years). LAA closure device implantation success was 95.8%. Thirty patients (5%) experienced periprocedural complications. Results based on a <24- or >24-month follow-up: deaths: 13.1% vs. 4.6% ( $p < 0.001$ ); ischemic stroke: 2% vs. 1.5% ( $p = 0.514$ ; expected: 8.4%); intracranial hemorrhage: 1.7% vs. 0.4% ( $p = 0.297$ ); gastrointestinal bleeding: 7.9% vs. 1.2% ( $p < 0.030$ ); major bleeding: 7.6% vs. 2.6% ( $p < 0.006$ ; expected: 6.3%). Age (HR 1.1), intracranial hemorrhage (HR 6.8) and stroke during follow-up (HR 2.7) were significantly associated with higher mortality.

**CONCLUSION** LAA closure significantly reduced the incidence of stroke from the first year. Reduction of bleeding events became significant after longer follow-up. Intracranial hemorrhage, age and stroke during follow-up were associated with higher mortality.

**CRT-700.42**

**Etiologies, Trends and Predictors Of Readmission After Left Atrial Appendage Occlusion**



Anil Kumar K. Jonnalagadda,<sup>1</sup> Charan Yerasi,<sup>2</sup> Byomesh Tripathi<sup>3</sup>  
<sup>1</sup>Medstar Washington Hospital Center, Elkridge, MD; <sup>2</sup>St Joseph Hospital Medical Center, Phoenix, AZ; <sup>3</sup>Geisinger Medical center, New York, NY

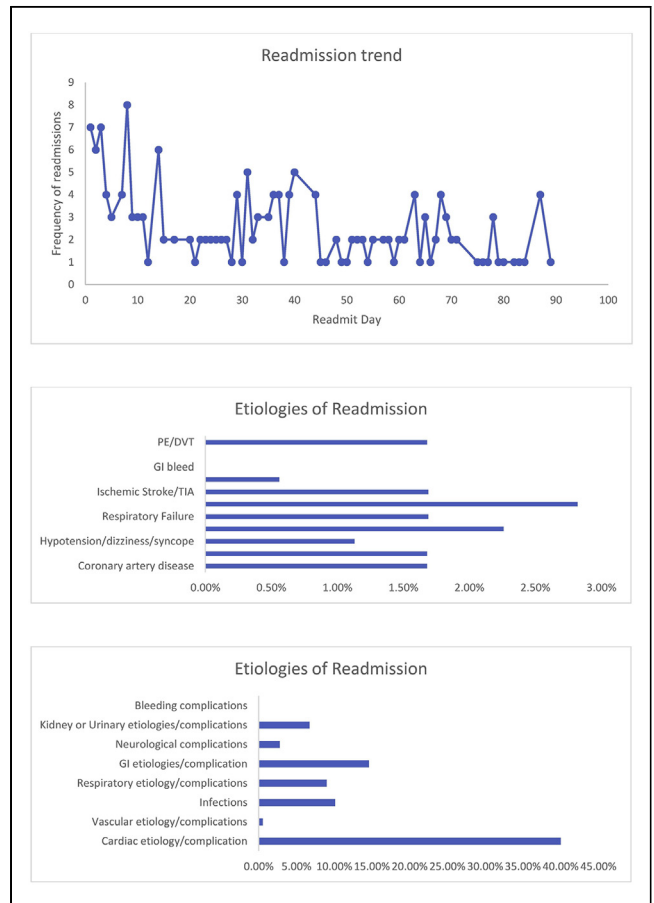
**INTRODUCTION** Left atrial appendage occlusion (LAO) is approved for non-valvular atrial fibrillation (AF) in patients who are at high risk of stroke but unable to tolerate anticoagulation. We studied the causes and predictors of readmission after LAO.

**METHODS** National Readmission Database (NRD) 2013 to 2014 was utilized to select study cohort. International Classification of Diseases, 9<sup>th</sup> revision (ICD-9CM) procedure code 37.90 was used. Admission within 90 day of index admission was considered as early readmission. Hierarchical two-level logistic models were used to evaluate outcomes.

**RESULTS** Among study cohort (n=1209), 20.3% (n= 246) were readmitted within 90 days of discharge following index admission. Most common etiologies for readmission were cardiac (40.04%, Heart failure-14.67%), respiratory (9.01%), GI (14.62%). Ischemic stroke/TIA happened in 1.69% of patients. Highest number of readmissions happened on 8<sup>th</sup> day after discharge (n= 8). Significant predictors of

readmission were Anemia (OR 2.09, 95% CI 1.25-3.4), Peripheral vascular disease (OR 2.26, 95% CI 1.29-3.9).

**CONCLUSION** We identified high-risk population for readmission following LAO as well as trends and most common causes of readmission, which could be utilized to implement individualized health care transition to reduce readmission, related cost.



**CRT-700.43**

**Incidence, Predictors and Prognostic Value of Acute Kidney Injury Among Patients Undergoing Left Atrial Appendage Closure**



Luis Nombela-Franco,<sup>1</sup> Josep Rodes-Cabau,<sup>2</sup> Ignacio Cruz-Gonzalez,<sup>3</sup> Xavi Freixa,<sup>4</sup> Luis Asmarats,<sup>5</sup> Hipolito Gutierrez,<sup>6</sup> Tania Rodriguez-Gabella,<sup>2</sup> Jose Carlos Moreno-Samos,<sup>3</sup> Gabriela Tirado-Conte,<sup>1</sup> L.R. Goncalves-Ramirez,<sup>6</sup> Juan Carlos Rama Merchan,<sup>3</sup> Ignacio Amat-Santos,<sup>6</sup> Gilles O'Hara,<sup>2</sup> Pilar Jimenez-Quevedo,<sup>1</sup> Armando Bethencourt,<sup>5</sup> Victoria Martin-Yuste,<sup>4</sup> Carlos Macaya<sup>1</sup>

<sup>1</sup>Hospital Clinico San Carlos, Madrid, Spain; <sup>2</sup>Quebec Heart and Lung Institute, Quebec City, Quebec, Canada, Quebec, QC, Canada; <sup>3</sup>Cardiology Department. University Hospital of Salamanca, Biomedical Research Institute of Salamanca (IBSAL). CIBER-CV, Salamanca, Spain; <sup>4</sup>Hospital Clinic of Barcelona, Barcelona, Spain; <sup>5</sup>Hospital Universitario Son Espases, Palma, Spain; <sup>6</sup>Institute of Heart Sciences (ICICOR), Hospital Clinico Universitario de Valladolid, Valladolid, Spain

**BACKGROUND** No data exist on the occurrence of acute kidney injury (AKI) after left atrial appendage closure (LAAC). The aims of this registry were to determine the incidence, predictors and prognostic value of periprocedural AKI after LAAC.

**METHODS** A total of 355 patients undergoing LAAC were included in the study. Acute kidney injury was defined as an absolute or a relative increase in serum creatinine of >0.3mg/dl or  $\geq 50\%$ , respectively, after the procedure or the need for haemodialysis during index hospitalization.