RATES AND PREDICTORS OF HOSPITAL AND EMERGENCY DEPARTMENT CARE AFTER CATHETER ABLATION OF ATRIAL FIBRILLATION

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Background: Rehospitalization and emergency department (ED) evaluation after atrial fibrillation (AF) ablation is common. Better identification of reasons for hospitalization and ED evaluation after ablation are needed, particularly as same-day discharge programs expand.

Objective: To define rates and predictors of hospital and ED care after AF ablation in US clinical practice.

Methods: The Optum database was used to study patients undergoing AF ablation between 1/1/16 - 5/30/19. Primary outcomes were all-cause hospital and ED care within 30 days of discharge. Independent predictors of all-cause ER and hospital admissions care were determined via logistic regression.

Results: Within 30 days of AF ablation, 1,440 of 18,848 patients (7.6%) required hospital care and 15% had ≥ 1 admission; 7.9% required ED care and 28.6% had ≥ 1 ED visit. The most common reasons for hospital care were supraventricular tachycardia (SVT)/AF (33.2%), heart failure (12.7%), and infection (12.2%). Notably infrequent causes for hospital care included angina or myocardial infarction (2.2%), ischemic stroke (1.5%), transient ischemic attack (0.5%), intracranial bleed (0.7%), pericardial effusion (1.4%), pericardial tamponade (0.06%), and gastrointestinal bleed (1.5%). The most common reasons for ED care were SVT/AF (15.0%), non-cardiac chest pain (13.3%), and non-infectious respiratory illness (12.2%). The figure depicts predictors of all-cause (A) hospital readmission and (B) ED care.

Conclusion: More than 1 in 7 patients requires unplanned hospitalization or ED care after AF ablation, most commonly due to SVT/AF. Predictors of unscheduled care include sex and several patient comorbidities. This study can inform quality improvement initiatives by identifying common causes for unscheduled care.

WHEN LOCAL IMPEDANCE MEETS CONTACT FORCE: DATA FROM THE CHARISMA REGISTRY

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Background: Highly localized impedance (LI) measurements during AF ablation have emerged as a viable real-time indicator of tissue characteristics and durability of the lesions created.

Objective: We investigated the impact of catheter-tissue contact force (CF) on LI behavior during pulmonary vein isolation (PVI).