

## Outcomes of Catheter Ablation for Atrial fibrillation in Patients with Hypertrophic Cardiomyopathy

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# Outcomes of Catheter Ablation for Atrial fibrillation in Patients with Hypertrophic Cardiomyopathy

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## INTRODUCTION

- Atrial fibrillation (AF) is common in adult patients with hypertrophic cardiomyopathy (HCM) and is associated with increased morbidity and mortality.
- Approximately one-third of patients with HCM develop AF during their lifetime.
- Catheter ablation can be effective in reducing the burden of AF in HCM patients.
- However, there is paucity of data regarding the safety and outcomes of catheter ablation in these patients.

## OBJECTIVE

- We intend to study the safety and in-hospital outcomes of catheter ablation for atrial fibrillation in patients with hypertrophic cardiomyopathy.

## METHODS

- We queried the National Inpatient Sample (NIS) database to identify all adults patients > 18 years with HCM who underwent catheter ablation for AF between 2003-2013.
- Baseline demographics and clinical features were studied.
- The primary outcome of interest was all cause in-hospital mortality.
- The secondary outcomes of interest were bleeding complications, pericardial complications, iatrogenic cardiac injury, vascular complications, pneumothorax and neurologic complications.

## RESULT

- We identified 1,468 HCM patients who underwent catheter ablation for AF between 2003-2013.
- The mean age of these patients was 62+/-15 years, 52 % were females, 67.4% were Caucasians, and 78.7% were performed in teaching hospital.
- 291 (19.8%) patients experienced procedure related complications, however in-hospital mortality was low (1.4%) (Table1).
- On multivariate analysis, age > 65 years (OR= 1.16; CI= 1.08-1.23; p<0.001), large hospital size (OR=1.44; CI=1.04-1.99; p=0.026), and teaching hospital (OR=1.34; CI= 1.14-1.50; p=0.002) were independent predictors of in-hospital complications.

Table 1: Complications associated with catheter ablation for AF in HCM patients

Outcome	AF ablation (1,468)
Death	20 (1.4%)
Bleeding complications	167 (11.3%)
Pericardial complications	28 (1.9%)
Iatrogenic cardiac injury	107 (7.3%)
Vascular complications	18 (1.3%)
Hemothorax/Pneumothorax	20 (1.4%)
Neurologic/Stroke/TIA	5 (0.3%)

AF: Atrial fibrillation; TIA: Transient Ischemic Attack

## LIMITATIONS

- Retrospective design of the study and possibility of varying coding practices of the hospital.
- Medication and procedural success data is unavailable due to administrative nature of the database.
- Long term follow up data is unavailable.

## CONCLUSION

- HCM patients undergo AF ablation at relatively young age.
- One-fifth of the HCM patients who underwent AF ablation experienced in-hospital complications while in-hospital deaths were rare.

## DISCLOSURES

None of the authors have anything to disclose.