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EVALUATING OUTCOMES OF SAME-DAY DISCHARGE AFTER CATHETER ABLATION FOR ATRIAL FIBRILLATION

Michael E. Field, Laura Goldstein, Kevin Corriveau, Rahul Khanna, Xiaozhou Fan, Michael R. Gold (2021) *Heart Rhythm O2*

STUDY OBJECTIVE

Investigate the post-procedural outcomes of same day discharge (SDD) vs overnight stay (ONS) after elective outpatient catheter ablation in patients with atrial fibrillation (AF)

METHODOLOGY

DATA SOURCE: IBM MarketScan® Commercial Claims and Encounters database (CCAE)

The CCAE contains health insurance claims data across inpatient and outpatient services, prescription drugs, and enrollment information for 43 million persons annually who are covered under employer-sponsored insurance.

Design: Retrospective, observational cohort study.

Population: 9,509 patients who underwent an elective outpatient catheter ablation with a diagnosis of AF

Analysis: Patients were matched using propensity score matching. Outcomes were compared among the matched cohort using a Cox proportional hazard model

Primary Outcomes: Overall complication rate within the 30-day post-procedure period; AF recurrence during the 4-12 months post-index ablation

RESULTS

There were 9,509 total patients who met eligibility criteria. Of these, 1,610 had SDD and 4,637 had ONS.

COMPARABLE SAFETY OUTCOMES BETWEEN SDD AND ONS

There was no significant difference in composite 30-day post-procedural complications between SDD and ONS patients.

(SDD 2.7% vs. ONS 2.8%; p=0.884)

Additionally, there was no significant difference in any of the individual types of complications investigated.

COMPARABLE EFFICACY BETWEEN SDD AND ONS

There was no significant difference in composite AF recurrence rate during the one-year follow-up.

(SDD 10.2% vs. ONS 8.8%; p=0.172)

There were also no significant differences in AF-related inpatient readmission, electrical cardioversion, and repeat ablation in the follow-up periods.

CONCLUSION

In a large, propensity-match, real-world sample, **same day discharge appears to be safe and have similar outcomes compared with overnight observation** following catheter ablation for AF.

Patient safety continues to be the most important consideration in determining hospitalization duration after ablation procedures. Appropriate selection of patients to undergo SDD is paramount.

SAME-DAY DISCHARGE AFTER CATHETER ABLATION IN PATIENTS WITH ATRIAL FIBRILLATION IN A LARGE NATIONWIDE ADMINISTRATIVE CLAIMS DATABASE

Michael E. Field, Laura Goldstein, Kevin Corriveau, Rahul Khanna, Xiaozhou Fan, Michael R. Gold (2021) *Journal of Cardiovascular Electrophysiology*

STUDY OBJECTIVE

Evaluate the outcomes of same day discharge (SDD) versus overnight stay (ONS) among patients with atrial fibrillation (AF) undergoing catheter ablation.

METHODOLOGY

DATA SOURCE: OPTUM® SES CLINFORMATICS® EXTENDED DATA MART DATABASE

The Optum database contains facility, physician, and pharmacy claims from approximately 13 million covered health plan members.

Design: Retrospective, observational cohort study.
Population: 6,600 patients who underwent an elective outpatient catheter ablation with a diagnosis of AF.
Analysis: Patients were matched using propensity score matching. Outcomes were compared among the matched cohort using a Cox proportional hazard model.
Primary Outcomes: Overall complication rate within the 30-day post-procedure period; AF recurrence during the 4-12 months post-index ablation.

RESULTS

There were 11,649 total patients who met eligibility criteria, 6,600 of whom were propensity score matched 1:3 (SDD:ONS) for the analysis. Of these, 1,660 patients had SDD and 4,940 had ONS.

COMPARABLE SAFETY OUTCOMES BETWEEN SDD AND ONS

There was no significant difference in composite 30-day post-procedural complications and 1-year composite rate of AF recurrence between SDD and ONS patients.

(SDD 4.7% vs ONS 3.8%; p=0.10)

Additionally, there was no significant difference in the following individual outcomes:

INPATIENT READMISSION
(5.8% IN SDD VS 6.4% IN ONS; P = 0.844)

CARDIOVERSION
(7.4% IN SDD VS 6.4% IN ONS; P = 0.325)

REPEAT ABLATION
(5.3% IN SDD VS 5.7% IN ONS; P = 0.625)

CONCLUSION

In a large, propensity-match, real-world sample, **same day discharge appears to be safe and have similar outcomes compared with overnight observation** following catheter ablation for AF.

Patient safety continues to be the most important consideration in determining hospitalization duration after ablation procedures. Appropriate selection of patients to undergo SDD is paramount.