

## **Reducing Urinary Catheterizations After Atrial Fibrillation Ablation**

Primary Investigators: Chrystal Maki BSN RN CPAN, Mary Grzybinski DNP CPAN

Beth Israel Deaconess Medical Center Boston, Massachusetts

Co-Investigators: Christina Jewell MSN RN CVRN-BC, Michael Carlozzi BSN RN,  
Melissa Falzone BSN RN

**Introduction:** Patients undergoing Atrial fibrillation (AF) ablation in the electrophysiology (EP) lab under general anesthesia receive large amounts of intravascular fluids. Normally patients receive Indwelling urinary catheters (IUC). We stopped placing catheters in these patients to prevent catheter related infections and also to prevent any mechanical injury. In lieu of IUC, bladder scans are performed at the end of the procedure and patients receive intermittent catheterization (IC) for volumes of 500 mL or greater based on urinary retention protocols.

**Identification of the problem:** In evaluating our practice, we questioned whether patients are being catheterized unnecessarily before they are allowed to wake and void spontaneously misinterpreting the term urinary retention.

**PICO question.** For adult patients undergoing AF ablation under general anesthesia, does allowing patients to wake and void voluntarily reduce bladder catheterizations while maintaining patient safety and comfort compared to catheterization at a bladder scan volume  $\geq 500\text{mL}$ .

**Methods/Evidence:** The Johns Hopkins Evidence-Based Practice Model was used for this project.

Data was collected on 135 AF ablation patients over a 2-month period. We looked at post procedure bladder scan volume, if the patient was catheterized and where (EP or PACU), DTV time, if the patient was unable to void (urinary retention), arrival time to PACU, and EP fluid intake.

**Significance of Findings/Outcomes:** Looking at the post procedure bladder scan  $>500\text{cc}$ , 63 patients would have been catheterized in the EP lab before this project. With our practice change and guidelines, 15 patients out of 135 patients, 11.11%, were catheterized. This project eliminated the need for catheterization in 48 AF ablation patients.

**Implications for perianesthesia nurses and future research:** By decreasing the number of patients catheterized, the risk of infection and urethral injury to AF ablation patients was reduced, allowing patients to wake up from anesthesia and void spontaneously while reducing the need for catheterization by 35.56% or 48 patients. Going forward, this project could be expanded to other procedures that require general anesthesia.