Implementation of Same Day Discharge After an Ablation Procedure for Supraventricular Arrhythmia Reduces Hospital Stay

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Introduction

- Atrial flutter and PSVT are arrhythmias that can be extremely bothersome for some patients.
- These rhythms are very amenable to catheter ablation.
- Success rate is >90% in most cases.
Portland VA Medical Center
Designated EP Center for VISN 20

- ALASKA
  - ANCHORAGE
- WASHINGTON
  - SEATTLE
  - SPOKANE
  - WALLA WALLA
- OREGON
  - PORTLAND
  - ROSEBURG
  - WHITE CITY
- IDAHO
  - BOISE
Standard of Care for Ablation Patients at VA Prior to June 2013

- Patient seen in clinic prior to the date of procedure to discuss the indication for the ablation procedure, associated risks and benefit.
- Patient came to Portland Outpatient Procedure and Surgeries (POPS) unit the morning of the procedure. EKG, history and physical, informed consent were obtained.
- Post procedure, they were admitted to the hospital for overnight monitoring.
Purpose of the Project

- To determine the feasibility of same day discharge after atrial flutter or PSVT ablation
Planning Stage

- Committee made up of 2 NPs, nurse manager of POPS and manager of cath lab
  - Literature review
  - Research standard of care in the community
  - Determine the policy and procedure as well as eligibility criteria for same day discharge
Literature Review

- **1990s – mostly single center study**
  - Sobera et al (1999): Transseptal RF ablation of AVRT
- **European studies**
- **Recent studies: both from European centers**
  - Marijon et al (2009): only multicenter study
Literature Review

Eligibility Criteria

- **Ablations:**
  - Included Atrial flutter, AVNRT, AVRT (accessory pathway), focal atrial tachycardia, transseptal approach for left-sided procedure
  - Excluded VT, AF, arrhythmia in the setting of congenital disease (Wolber), anteroseptal accessory pathway (Kalbfleisch)

- **Age exclusion:**
  - < 18 or > 70 (Kalbfleisch), elderly (Wolber)

- **Medical exclusion:**
  - patients with comorbidities (Wolber), CVA, venous thromboembolic disease, prosthetic mechanical valves, geographic (> 120 miles), familiar isolation, NYHA class IV heart failure, comorbid conditions that warrant further hospitalization (Marijon), obesity > 30% IBW (Kalbfleisch)

- **Logistical exclusion:** complete observation by 7PM (Man)
Community Standard of Care

- Centers surveyed
  - OHSU
  - Providence Medical Center
  - Kaiser Sunnyside

- All 3 centers have been discharging patients on the same day after an ablation procedure
Criteria for Same Day Discharge

- Uncomplicated ablations
  - Right-sided ablation: typical AFL, AVNRT
- Medically stable on the day of the procedure
- Patient must be accompanied by an adult driver
- If patient lives > 60 miles from medical center, he/she must lodge locally overnight
- Procedure must be completed before 2PM

Exclusion criteria:
- Left-sided ablation, AF ablation, VT ablation
- Hx of CVA or venous thromboembolic disease, unstable heart failure and patients with other co-morbid conditions e.g. prosthetic mechanical valve
Procedures

- Patient monitored for 5 hours at POPS unit post procedure: bedrest for 4 hours and ambulated for an hour prior to discharge.
- Patient seen by NP prior to discharge to ensure that they are stable and no hematoma/bleeding at the venous access sites.
- Patient discharged home or to local lodging if accompanied by an adult driver.
- Patient discharged to in-house lodging if traveling alone.
- Follow-up phone call by NP the following morning to check on patient progress and to ensure no complication.
Result

Total Number of Ablation (6/20/13-12/12/13): 60

20 Excluded
- Inpatient: 12
- Complicated ablation: 8

AFL and PSVT ablation: 40

19 Excluded
- Medical/family issues: 8
- Lack of availability of lodging bed: 5
- Procedure ended too late for recovery in POPS: 6

Eligible for same day discharge: 21

1 admitted due to procedural issues

Discharged home: 20
Result

- One patient reported minor bruising at the femoral venous access site after discharge
- No other complications were reported
Conclusion

- Same day discharge after ablation is feasible and safe to date
- It reduces the need for hospitalization
- More patients will qualify if we can overcome logistical issues
  - Lodging availability
  - Extending POPS hours: cost analysis in progress to determine feasibility