



## **SAFETY AND FEASIBILITY OF SAME DAY DISCHARGE AFTER TAVR, MITRACLIP, TMVR AND WATCHMAN IMPLANTATION: CALL OF THE PANDEMIC OR EXPECTED EVOLUTION?**

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### **BACKGROUND**

Same-day discharge (SDD) after structural heart procedures such as valve replacements and repairs is not well studied. There is shortage of hospital beds in the ongoing pandemic that could affect care of patients with structural heart disease.

### **OBJECTIVE**

We designed a protocol to assess the safety and feasibility of same-day discharge after transfemoral TAVR, MitraClip, Transcatheter Mitral valve in valve replacement, and Watchman implantation.

### **METHODS**

A total of 82 patients undergoing elective SHD interventions between July 2020 till Sept 2021 who opted to go home on the same day in view of the ongoing pandemic were included in the study. Patients checked in at same-day service center, underwent the procedure in the Hybrid lab, recovered in post anesthesia care unit and were wheeled back to same-day service center before discharge. These patients had good social support, met our centers safety protocol, registry requirements, lab, and ambulation criteria. We assessed the demographics, safety, and outcomes.

### **RESULTS**

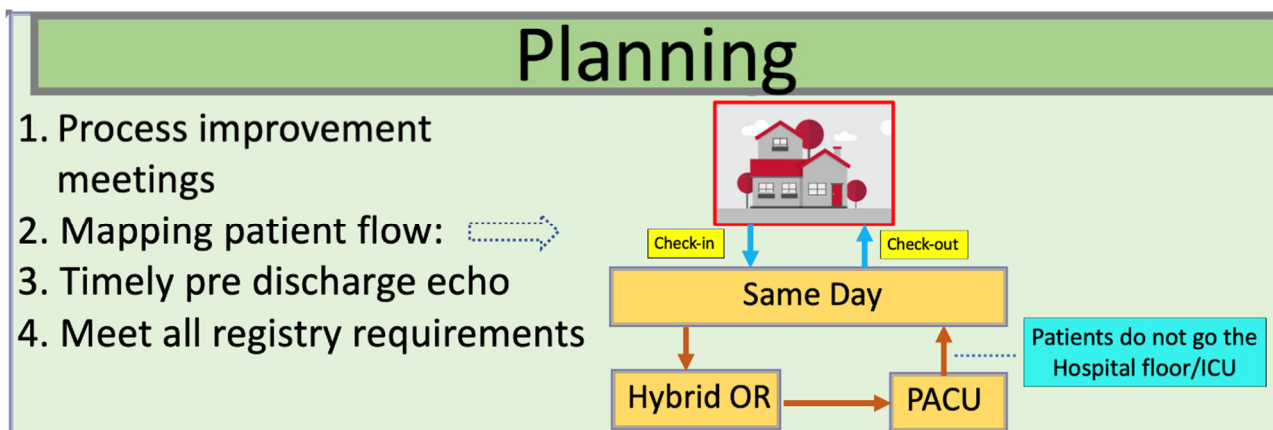
Of the 82 patients 31 underwent transfemoral TAVR (including one valve in valve), 1 balloon aortic valvuloplasty, 7 MitraClip, 2 transcatheter mitral valve in valve and 41 Watchman. The mean age was 75.31years (53 – 88y) with men forming a majority (n=48). The mean creatinine was 1.01 (0.6 – 2.6). General anesthesia was used in 81 and local anesthesia only in one. The mean contrast usage was 80 ml of visipaque (0 – 200ml). The mean procedure time was 35 min (14 – 121min). All patients were ambulated at least twice. The first within 2 hours of the procedure and the 2nd before discharge. There was no electrical block noted anytime during the procedural or in the periprocedural period. There was only one patient with mild PR prolongation of 20 msec who was discharged on an event monitor. The mean length of stay was 11.1 hours (3 – 16.1h). All patients received a cell number to call in case of any concerns and for easy access. All patients received a call in the evening on the same day and on the next day morning. There were no readmissions or deaths at any time during follow up. All patients were followed up at 1 month and 1 year.

### **CONCLUSIONS**

Selective same-day discharge after transfemoral TAVR, balloon aortic valvuloplasty, MitraClip, Transcatheter Mitral valve in valve replacements, and Watchman implantation is safe and



feasible and may be considered in patients who opt for it, have a good social fabric, meet the safety criteria and registry requirements. None of our patients entered the Hospital floor or ICU. SDD has enormous potential to reduce healthcare costs, improve patient satisfaction and improve hospital bed availability, importantly in the ongoing COVID pandemic.



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# SDD Protocol

Elective SHD procedure



Favorable pre procedural criteria



Favorable procedural criteria



Favorable post procedural criteria



Patient and caregiver prefers to go home

Eligible for same day discharge

- Pre procedural evaluation**
1. Good mental status, fairly independent, follows instructions well
  2. Stable hemodynamics
  3. No significant conduction abnormalities/preexisting PPM
  4. No major hematological conditions
  5. No major allergies
  6. Well prepared with use of Incentive spirometer

- Procedural evaluation**
1. No Access site complications
  2. No procedural complications
  3. No major conduction disturbance requiring temporary pacing
  4. No anesthesia related complications

- Post procedural evaluation**
1. No significant changes in labs
  2. No significant changes in ECG from baseline. QRS broadening of no more than 20 ms from baseline.
  3. Good valve/device function with no new RWMA, no drop in EF and no effusion by TTE.
  4. Full recovery from anesthesia
  5. Ambulation: twice, once in 2 -3 hours of procedure and 2<sup>nd</sup> before discharge.
  6. 2<sup>nd</sup> dose of antibiotics before discharge.
  7. Social support
    - i. Has a caregiver to stay overnight
    - ii. Has a working cell phone
    - iii. Has reliable transportation
    - iv. Has the ability to get the prescribed medications