Outpatient, Transradial PCI - Same Day Discharge

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Philosophy
Patients who walk in for an elective outpatient diagnostic cardiac catheterization and require an interventional procedure (PCI), can be home the same day unless the intervention is complicated or there are physical or social issues that would necessitate an overnight stay.

Decision for the same day discharge is based on uncomplicated procedural success: No acute closure, no uncovered dissection, TIMI-3 flow, and no procedural complications.

Methods
Consecutive outpatients with stable coronary disease undergoing PCI with stent were reviewed using National Cardiology Data Registry (NCDR) data. Patients were offered Same Day Discharge, but were informed that overnight observation may be required pending the outcome of the procedure.

Results - PCI
Pre-treatment with high-dose clopidogrel or short infusions of IV platelet inhibitors were used in all patients (N=97 radial outpatients vs. 819 inpatients) along with antithrombolytic therapy. Currently, 57% of procedures in our hospital are radial, compared to less than 5% in all US hospitals. Transradial access with 5 or 6 French catheters were used with most scheduled ad hoc PCI. After 1 year from procedure with same day discharge complications identified were: four patients had hemotoma at access site, six patients had loss of pulse (occluded radial artery), and 1 patient had inflammation at the access site requiring antibiotics. There were no readmissions due to cardiovascular changes including restenosis, CKP rises or EKG changes.

The outcome yielded high levels of patient/family satisfaction with no significant adverse events. The Observation Unit has received the "Highest Patient Satisfaction" Award in the hospital for the past 4 years.

Discussion
New data from recent research studies (EASY, PRESTO-ACS, STRIDE, EPOS, ACUITY, and PREVAIL) indicate that radial access is associated with reduced bleeding, is safe, and effective, even in complex lesions. The EASY Study resulted in a 50% reduction in medical costs. Above studies have shown this approach reduces bleeding, long-term mortality and ischemic events.

Significant advances in PCI and experienced team members at our institution have reduced the length of stay so that more patients are going home the same day.

Members of the Cath Lab will remove the sheath and place a compression band on the access site while the patient is on the procedure table. Team members of the outpatient unit (HOVDU) will monitor patients' ambulation and remove the compression band when hemostasis has been established. Patients need to be taking nutrition & fluids prior to discharge. Urine output is documented.

Conclusions
Radial approach to outpatient stent placement provides an efficient approach in select patients. With shorter outpatient stays, high occupancy outpatient units can operate more efficiently without patient dissatisfaction and patients are exposed to less hazards of hospitalization. The Nurse Practitioner involved in post procedural teaching to the patient and family and discharge follow up facilitates the success of the Same Day Discharge process. Involvement of all staff towards ensuring quality care in recovery and discharge education is improving outcomes and patient satisfaction.

References
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Ages: 06.4 % less than age 44
31.4 % age 45-54
20.2 % age 55-64
19.3 % age 65-74
14.0 % age 75-80+

0
360 minutes
80 [60, 100] minutes (includes diagnostic, too)

6.5 [5.1, 7.9] hours
No early MACE
No late bleeding
No patient complaints
No CKP?

Admission
Aspirin 325 mg
Clopidogrel Load
Bolus GP IIb/IIIa

>2 hrs
<2 hrs
none

Procedure
No GPI

Platelet Inhibitor Infusion

Time Line

Discharge

No early MACE
No late bleeding
No patient complaints
No CKP?