Results: Access site cross over was needed in 1 patient (0.002%), and conversion from sheathless guiding catheter to conventional guiding catheter in 1 patient (0.002%). Acute procedural success rate was 95.9%. The median duration of the procedures was 50min (IQR 41-65). The median time of fluoroscopy was 16.5min(IQR 12.7-23.6). The median contrast media use was 136ml (IQR 110-160). Guiding catheter-induced coronary artery dissection occurred in 1 patient.

Conclusions: Routine use of the Sheathless guide catheter for TRA in PCI for STEMI is feasible with a low crossover rate and a high rate of procedural success.

TCT-272
Comparative Effectiveness of the Different Arterial Approaches “Transbrachial, Transradial and Transfemoral” in Percutaneous Coronary Interventions: Real-world Experiences
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Background: Up to our knowledge, there’s no data investigating the three different arterial approaches (Transbrachial, Transradial and Transfemoral) in PCI. Coping with our daily needs for diversity of tools and approaches we explore our extensive experiences with the different PCI accesses.

Methods: This retrospective observational single center trial investigated 4955 CAD patients underwent coronary revascularization through one of the studied approaches between April 2006 to June 2012. After application of inclusion and exclusion criteria, A total of 1102(22.2%), 2797(56.4%) and 1054(21.2%) patients were distributed between April 2006 to June 2012. After application of inclusion and exclusion criteria, A total of 1102(22.2%), 2797(56.4%) and 1054(21.2%) patients were distributed. All patients were retrospectively evaluated regards the predefined primary safety endpoint (In hospital Cardiac death, MI, stroke, major access site hematoma and/or bleeding) and efficacy endpoints (Access and procedure success/time, contrast volume, cross over rate and access site complications).

Results: Over the 7 year study period, our results showed that both TBA and TRA associated with higher procedural success compared with TFA(P=0.001) with no significant difference in access success and time. Both TBA and TRA groups have shorter fluoroscopy time(P=0.001). Regards the safety endpoints, our results showed that TFA patients have higher rate of MACE and In-Hospital cardiac death compared with TBA patients(P=0.008 and 0.01 for MACE and cardiac death respectively). Such difference is not encountered between TBA and either TRA or TFA groups; however, there was no significant difference in MI, stroke, major access site hematoma and/or bleeding and end points efficacy (Access and procedure success/time, contrast volume, cross over rate and access site complications).

Conclusions: Based on the previous data, transbrachial approach for PCI could be a good alternative for the standard of care approaches with considerable safety and efficacy.

TCT-273
Patient Characteristics that Deter use of a Bleeding Avoidance Strategy during PCI
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Background: Use of bleeding avoidance strategies (BAS) such as transradial access, bivalirudin, and femoral closure devices have been shown to lower bleeding events after PCI but used most often in those at lowest risk of bleeding. Patient characteristics that deter use of BAS in higher risk patients for bleeding are not clearly established.

Methods: Patients undergoing PCI at four University of Pittsburgh Medical Center academic hospitals were enrolled in a hospital-based registry and followed prospectively beginning in October 2011. Bleeding events and bleeding risk score (BRS) were defined by NCDR criteria and definitions. Low risk of bleeding defined as score<13 and high risk of bleeding as score≥13.

Results: Among 2178 consecutive PCI patients (66.7% for acute coronary syndrome), 978 patients had a calculated BRS of <13 and 1200 patients ≥13. BAS use was more likely in the low risk group (91.1 vs 83.0%, p=0.0001). Specific strategy used in the low and high-risk groups were femoral access closure only in 23.5 vs 28.2% (p=0.01), routine use of the sheathless guide catheter for TRA only in 21.6 vs 27.1% (p=0.01). Femoral access closure only in 4.1 vs 3.8% (p=0.68), and a combination of BAS in 41.9 vs 30% (p=0.0001). Among the high risk group, logistic regression was used to determine the independent risk factors associated with use of BAS (Figure 1).

Conclusions: Utilization of a BAS has been increasingly advocated for especially in high-risk patients for bleeding. However, recognizing deterrents to utilization allows for understanding if use is even feasible and further studies are necessary to study the safety and efficacy of BAS in higher risk patients.

TCT-274
A Randomized Prospective Study of Same Day Discharge after Coronary Artery Stenting and Facilitated Femoral Hemostasis with a Closure Device
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Background: Despite advances in interventional cardiology, and that safety and feasibility of outpatient percutaneous coronary intervention (PCI) has been previously demonstrated, overnight stay starting at 11:00 PM remains the standard of care in the United States. The study aims to compare outcomes, patient satisfaction, and cost of same day (SD) vs. delayed hospital discharge (DD) after PCI-stenting and femoral hemostasis with a vascular closure device (StarClose or ProGlide).

Methods: Consecutive patients undergoing coronary angiography (n=2,480) at University of Southern California Hospitals were screened; 493 patients were consented for inclusion. Four hours following PCI, 100 patients were randomized to SD (n=50) or DD (n=50). Patients were followed for one month and patient satisfaction surveys completed at 24 hours and one-month post discharge. Cost savings were calculated based on Medicare payment rates.

Results: SD and DD groups were well distributed with similar baseline demographic and angiographic characteristics. Mean age was 58.1±8.8, 86% were male, 16% smokers, 44% diabetic, 41% had history of MI and 31% CRI. NSTEMI or unstable angina (UA) was the presentation in 30% of SD vs. 44% of DD patients (p=0.2) and all other patients had stable angina (SA) (70% in DD vs. 56% in SD, p=0.15). Multivessel stenting was performed in 74% and 60% of SD and DD groups, respectively (p=0.14). At 30 days post-discharge, the primary end point (death, myocardial infarction or repeat revascularization) occurred in one DD patient (2%) vs. two SD patients (4%), p=1.0. The secondary end points of...