Conclusions: The database included 1330 patients, 836 treated with a TR and 494 with a TF approach. After a propensity matched analysis performed to exclude possible confounders we identified 450 matched patients (225 TR and 225 TF). The incidence of AKI in the 2 matched groups was lower in patients treated with TR primary PCI (0.4% vs. 10.0%, p=0.007) MACE and stent thrombosis were not different among study groups, whereas major bleedings were more often seen in the TF group. At multivariate analysis, femoral access was an independent predictor of AKI (OR 1.599, 95% CI 1.015-2.394, p=0.042).

Conclusions: in this database of primary PCI the risk of AKI was lower with a TR approach and the TF approach was an independent predictor for the occurrence of this complication.

TCT-831
Feasibility of Radial Artery re-puncture for trans-radial procedures
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Background: Trans-radial procedures (TRP) are the standard technique used by of highly experienced professionals. If within the first 30 days of performing a TRP a second procedure was necessary, there is not enough evidence to support the efficacy and safety of re-puncturing the radial artery. The goal of the study is to assess the efficacy and safety of re-puncture of the radial artery in patients with a TRP performed in the previous 30 days.

Methods: From March to October 2013 we analyzed prospectively and consecutively all diagnostic and therapeutic TRP performed in patients with a TRP done in the previous 30 days. In all patients a re-puncture of the same radial artery used in the earlier procedure was done, followed by the introduction of a 6 Fr sheath. We analyzed the patients’ characteristics and the occurrence of any vascular complication related to the procedure. Patients were classified in 3 groups according to when the re-puncture was performed - group 1: re-puncture within the first 48 hrs; group 2: re-puncture between the 3rd and 7th days and group 3: re-puncture between the 8th and the 30th days after the first procedure.

Results: 73 patients were included in our study. 35% belonged in group 1, 10% in group 2 and 52% in group 3. Average patient characteristics were: 67 y/o, male 68%, HTN 77%, DM 22% and previous CABG 5%. Of all the cases, 27% were diagnostic and 73% were therapeutic. All the procedures could be accomplished successfully without either severe radial artery spasm or any other vascular complication.

Conclusions: re-puncture of the radial artery in the first 30 days after a previous TRP is effective and safe because it did not correlate with TRP failure nor any vascular or ischemic complication.

TCT-832
Single Transradial Catheter for Right and Left Coronary Diagnosis and Intervention
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Background: There is no data about the utilization of a single transradial guiding catheter for the current routine, transradial, right and left coronary diagnosis and intervention. We investigated the feasibility and safety of using 6 Fr Ikari left (3.5) guiding catheter for this purpose.

Methods: This prospective single-center study enrolled 621 consecutive patients referred for transradial coronary diagnosis with ad hoc coronary intervention.

Results: The radial artery was successfully accessed in 96.8% of patients. Right and left coronary arteries were successfully engaged in 98.1% of cases. Engagement with good back-up at the right and left coronaries (device success) was achieved in 96.6% of cases. Coronary intervention was performed in 61.2% of cases, among them, 84.5% had coronary stenting. Procedure success was 98.2%. Procedure time was 21.4 ± 15.1 and 65.4±46.1 minutes; mean fluoroscopy time was 6.8 ± 7.2 and 24.1±18.9 minutes and the mean contrast volume was 96.2 ± 45.3 and 197.9±46.2 ml for diagnostic and interventional cases respectively. One patient (0.16%) had catheter related radial artery spasm and 3 patients (0.48%) encountered a catheter induced RCA dissection.

Conclusions: Right and left coronary angiography and intervention are feasible and highly successful using IK 3.5 as a single transradial guiding catheter.

TCT-833
Abstract Withdrawn

TCT-834
Factors affecting procedure time between elective and primary percutaneous coronary intervention using transradial approach
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Background: Recent efforts to reduce time delay in ST-elevation myocardial infarction (STEMI) have decreased door-to-balloon time. But, it is not clear whether transradial primary percutaneous coronary intervention (PCI) can reduce procedure time compared to elective PCI. Therefore, we tried to compare the procedure time and factors affecting procedure time according to primary vs. elective PCI using transradial approach.

Methods: In a single center from Jan 2011 to Dec 2012, 1252 patients undergoing transradial PCI were enrolled. Clinical total occlusion or transfemoral PCI were excluded. Patients were divided into 2 groups (primary vs. elective). Five operators were reclassified as radial expert or radial non-expert according to the median procedural time. Factors affecting procedure time were analyzed in the highest quartile of total procedural time.

Results: The use of left radial artery was 1203 (96.1%). Mean age was 65.2±11.2 years and 855 patients (68.3%) were men. Primary PCI group was younger and had more male patients. Elective group had more hypertension, diabetes mellitus, hyperlipidemia and history of previous PCI. Elective PCI group was treated with more stents but the frequency of multivessel PCI was not different. Puncture time, time for diagnostic coronary angiography, coronary intervention time and total procedure time were faster in primary PCI group (1.2±0.9 vs. 1.7±2.5; 6.1±3.7 vs. 8.9±6.0; 35.0±16.5 vs. 43.7±22.2; 42.3±17.0 vs. 54.3±23.3 mins, all p< 0.001). In univariate regression analysis, the predictors for affecting total procedure time were radial expert (odds ratio [OR] 0.679, 95% confidence interval [CI] 0.522-0.884), STEMI (OR 0.265, 95% CI 0.175-0.402), multivessel PCI (OR 5.019, 95% CI 3.703-6.804) and aspiration thrombectomy (OR 0.557, 95% CI 0.397-0.782). Multivessel PCI was the only predictor in multivariate regression analysis (OR 6.169, 95% CI 2.343-16.240).

Conclusions: In a single center experience, transradial primary PCI showed shorter puncture time, time for diagnostic coronary angiography, intervention time and total procedure time than elective PCI. Radial expert and STEMI were the predictors for shortening procedure time in univariate regression analysis.

TCT-835
Short- And Long-Term Access Site Complications After Transradial Coronary Angiography And Percutaneous Coronary Intervention
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Background: The incidence of short- and long-term access site complications after transradial coronary angiography and percutaneous coronary intervention (PCI) were investigated using color duplex ultrasonography and non-invasive angiological tests.

Methods: Between January 2010 and June 2012 604 patients underwent transradial coronary angiography or PCI in our institution. Patent hemostasis was achieved using the TR Band (Terumo Medical Corporation). Of these 604 patients, 395 agreed with an angiological follow-up examination including color duplex ultrasonography and non-invasive angiological tests. They were examined between October 2012 and October 2013.

Results: There were 86 females (21.7%) and 309 males (78.3%), mean age of the examined patients was 66 years (range 41-90 years). In 201 (50.88%) patients a PCI was performed. Crossover to transfemoral approach was needed in 21 patients (5.3%). Mean compression time was 4.17 (+/- 1.26, range 1.5-10) hours. Mean procedure time was 51.2 minutes (+/- 36.38). Only 2 patients were diagnosed with an acute access site complication. One patient was treated surgically after rupture of a false aneurysm resulting compartment syndrome. Another patient underwent surgical thrombectomy due to acute occlusion of radial artery. On long-term follow-up occlusion of the radial artery was diagnosed using color duplex ultrasound in 7 patients (1.77%, 95% CI 0.05-0.31). None of the patients with occluded radial artery had symptoms.

Conclusions: Acute access site complications after transradial coronary angiography and PCI are very uncommon. Radial artery occlusion on long-term follow-up is a rare complication with a good prognosis and no clinical or hemodynamic significance for the perfusion of the fingers.

TCT-836
Operator Radiation Exposure During Transradial Coronary Angiography in Obese Patients
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Background: Transradial coronary angiography (TRCA) procedures performed to obese patients (OP) might be associated with high operator radiation doses (ORD), since thickness of the patient is one of the most important factors in radiation scatter