

Bifurcation and Left Main Stenting (TCTAP A-150 to TCTAP A-152)

TCTAP A-150

Primary Clinical Research of PCI Through Transradial Artery Approach in Selective 30 Patients with Stable Angina Pectoris

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Background: To assess the clinic feasibility and safety of PCI through transradial approach to treat the patients with coronary heart diseases.

Methods: 30 patients with stable angina pectoris (male 26, female 4; age 65±10.4 years) whose radial artery diameter was larger and Allen's test was positive. We recorded the PCI time, the success rate of PCI, in hospital times, and the complication rate related to acupuncture vessels.

Results: 30 radial arteries were acupunctured successfully. The PCI time and the success rates of PCI were similar TRA-PCI and TFA-PCI groups (48±3.6 vs 45±10.2 min; 100% vs 96.7%, P>0.05). There were significant difference in-hospital times between the two groups (3.2±1.6 vs 5.4±1.8 d, P 0.05). The access artery complications in TRA-PCI group were much lower than in TFA-PCI group.

Conclusion: The radial artery might be selected as one approach for complex PCI. It is safe and effective approach for coronary intervention in selected patients, and may be widely used in clinical practice.

TCTAP A-151

Unprotected Left Main Coronary Artery (ULMCA) Percutaneous Coronary Intervention (PCI)- Our Experiences at Apollo Hospitals Dhaka

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Background: Aim of the study was to evaluate the primary procedural success of Percutaneous Coronary Intervention (PCI) of Unprotected Left Main Coronary Artery (ULMCA) either using either Bare-metal stents (BMS) or Drug Eluting Stent (DES). **Methods:** Total 33 patients were enrolled in this very preliminary study. Among them, Male: 25 and Female: 8. Total 35 stents were deployed. Mean age were for Male: 59 yrs, for Female: 62 yrs. Associated CAD risk factors were Dyslipidemia, High Blood pressure, Diabetes Mellitus, Positive FH for CAD and Smoking (all male).

Results: Among the study group; 26 (78%) were Dyslipidemic, 24(70%) were hypertensive; 17 (51.5%) patients were Diabetic, FH 7(21%) and 11(33%) were all male smoker. Female patients were more obese (BMI M 26: F 27) and developed CAD in advance age. Common stented territory were LM: 20 (60%), LM-LAD 7 (22%) and LM-LCX 6 (18%). Average length and diameter of stent was 3.5 and 18 mm respectively. Stent used: BMS 5 (15%), DES: 28 (85%). Among the different DES, Everolimus 11 (39.3%), Sirolimus 10(35.7%) and Zotarolimus Paclitaxel 3 (10.7%), Biolimus 3 (10.7%), Zotarolimus 1 (3.6%) were used. Patient remained asymptomatic 1 year after the procedure.

Conclusion: Our study has shown that the unprotected LM stem PCI is safe and effective alternative to CABG in patient with significant LM stem disease.

TCTAP A-152

Impact of Final Kissing Balloon Inflation After Simple Stent Implantation for the Treatment of Non-left Main True Coronary Bifurcation Lesions in Patients with Acute Coronary Syndrome

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Background: It is still a controversial issue that performing final kissing balloon inflation (FKBI) after simple stent implantation for the treatment of coronary bifurcation lesion is mandatory. Besides, acute coronary syndrome (ACS) patients who underwent bifurcation percutaneous coronary intervention with simple stent implantation had worse prognosis compared to stable angina pectoris patients. Therefore, we sought to evaluate the impact of FKBI after simple stent implantation for the treatment of non-left main true coronary bifurcation lesions in patients with ACS.

Methods: Two hundred and fifty one eligible patients (67.7% male, mean age 61.7 ± 10.4 years) were enrolled. The study population was divided into two groups according to the performance of FKBI. The primary end point was major adverse cardiac event (MACE); target lesion revascularization, non-fatal myocardial infarction, and cardiac death during the follow-up period.

Results: Over a mean follow-up period of 3.0 ± 1.9 years, there were 29 MACEs (10 TLR, 6 non-fatal MI, and 13 cardiac deaths), with an event rate of 11.6%. Kaplan-Meier survival analysis revealed that FKBI group had favorable outcome compared to non-FKBI group with regard to hard events (p=0.010) as well as composite MACEs (p=0.008). In multivariate analysis, FKBI was a significant predictor of composite MACEs [hazard ratio 0.389 (95% confidence interval 0.185-0.817, p=0.013)] and hard events [hazard ratio 0.321 (95% confidence interval 0.129-0.803, p=0.015)].

Table. Prognostic impact of performing FKBI after simple stent implantation for the prediction of composite MACEs and hard events in ACS patients

	Unadjusted		Adjusted	
	HR (95% CI)	p-value	HR (95% CI)	p-value
Composite MACE (TLR, non-fatal MI and cardiac death)	0.381 (0.182-0.798)	0.011	0.389 (0.185-0.817)	0.013
Hard event (Non-fatal MI and cardiac death)	0.321 (0.129-0.798)	0.014	0.321 (0.129-0.803)	0.015

Abbreviations. CI = confidence interval; FKBI = final kissing balloon inflation; HR = hazard ratio; MACE = major adverse cardiac event; MI = myocardial infarction; TLR = target lesion revascularization. Adjusted for baseline clinical risk factors (age, gender, smoking, diabetes, hypertension, dyslipidemia) and multi-vessel disease.

Conclusion: In terms of prognosis, performing FKBI after simple stent implantation for the treatment of non-left main true coronary bifurcation lesions may be mandatory in ACS patients.

Carotid & Neurovascular Intervention (TCTAP A-153)

TCTAP A-153

Feasibility and Safety of Using Sheathless Standard Guiding Catheters for Complex Coronary and Peripheral Interventions by Trans-radial Approach

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Background: Our aim was to evaluate the feasibility and safety of using sheathless standard catheters for complex coronary and peripheral interventions by trans-radial approach.

Methods: During January 2010 to June 2012, total 150 patients received sheathless trans-radial approach (TRA) *percutaneous coronary intervention* (PCI) for complex coronary and peripheral interventions as chronic total occlusion (CTO), severe triple vessel coronary artery disease (CAD), left main (LM) disease, and carotid artery disease. These patients underwent PCI by using sheathless standard guiding catheters and the procedural success and complication rates were recorded. Routine assessments of radial artery pulsation via clinical follow up were done at 1 month, 6 month and 1 year after procedure.

Results: Total 117 patients received sheathless TRA PCI for complex coronary lesions. Total 33 patients underwent sheathless TRA intervention for carotid artery stenting. Access related complication was only 2.6% and catheter related complication was 13.0% due to difficult CTO lesion. Total procedure successful rate was 93.5% and no patient needs emergent surgery. After one year follow-up, only 6 patients suffered from radial artery occlusion (RAO). We compared RAO group and non-RAO group and only age and procedural success had significant difference (P=0.032; P=0.032). The incidence of RAO of PCI for carotid artery disease was higher than group with PCI for complex coronary artery disease (10.71% vs. 2.86%).

Conclusion: In our study of 150 consecutive patients, using 7F sheathless guiding catheter to perform TRA PCI for complex coronary and peripheral interventions is associated with a high procedural success (93.5%) and a low access complication rate (2.5%). After one year follow-up, low incidence of RAO of PCI for complex CAD (2.86%) noted. We need to consider the occurrence of RAO if longer procedural time. However, relatively high incidence of RAO of PCI for carotid artery disease needs to consent, even if small group.