transfusion) occurred in the procedure. The rate of all-cause death was 7.2%. Restenotic lesion (p=0.004), chronic total occlusion (p=0.03), TASC type C or D lesion (p=0.009) and smaller stent diameter (p=0.02) have an effect on restenosis.

Table below shows the correlation between these parameters and restenosis.

Conclusion: FP stenting with DES yielded acceptable outcomes in short-term.

parameter	p value	parameter	p value
Female	0.65	CLI	0.89
Age	0.41	Poor runoff	0.82
BMI	0.93	De novo/Restenotic lesion	0.004
Diabetes mellitus	0.39	Ostium	0.83
Hypertension	0.82	Popliteal A	0.37
Dyslipidemia	0.51	Reference diameter	0.11
CKD	0.35	Lesion length	0.11
HD	0.65	Calcification	0.77
Smoking	0.11	CTO	0.03
Low EF	0.96	TASC C/D	0.009
Cilostazol	0.61	Final balloon size	0.65
		Stent diameter	0.02
		Total stent length	0.57

ORALS

TCTAP A-105

Comparison on Vascular Response Between Bare-metal Nitinol Stent Implantation and Paclitaxel-eluting Nitinol Stent Implantation in the Superficial Femoral Artery Lesion Assessed by Intravascular Ultrasound

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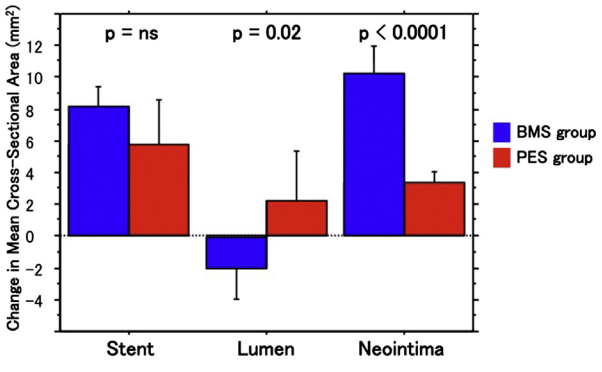
Background: Although previous intravascular ultrasound (IVUS) studies reported that drug-eluting stent (DES) have successfully decreased in-stent restenosis (ISR) by inhibiting neointimal hyperplasia (NIH) in the coronary artery lesion, no IVUS data for NIH after DES implantation in the superficial femoral artery (SFA) has been published.

Methods: We analyzed 38 SFA lesions that underwent endovascular treatment (EVT) with self-expanding bare-metal nitinol stents (25 lesions, BMS group) or paclitaxel-eluting nitinol stents (13 lesions, PES group). At 6 months after EVT, follow-up angiography and IVUS examination were performed in all cases. The serial IVUS volumetric analysis was performed after stent deployment and at follow-up. Vessel, stent, lumen, plaque and neointimal volumes were calculated using Simpson's rule. Mean stent, lumen and neointimal areas were computed as the volume divided by the stent length. Mean late lumen area loss was defined as mean lumen area immediately after initial deployment - mean lumen area at follow-up. The primary end point of this study was mean late lumen loss at 6-month follow-up. The secondary end point was angiography-defined ISR rate at 6 months.

Results: The mean follow-up period was 189 ± 39 days. Mean neointimal area was smaller in PES group compared to BMS group (3.3 ± 1.0 mm^2 vs. 10.2 ± 4.1 mm^2, p<0.001, figure). Mean late lumen loss was significantly lower in PES group compared to BMS group (-2.3 ± 3.7 mm^2 vs. 2.1 ± 4.7 mm^2, p<0.05, figure). Angiography-defined ISR rate was similar between two groups.

Conclusion: EVT with DES in the SFA lesions might decrease NIH that associated with ISR.



TCTAP A-106

Effects of Percutaneous Transluminal Renal Angioplasty on Blood Pressure Evaluated with 24-hour Monitoring

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Background: Percutaneous transluminal renal angioplasty (PTRA) improves patency in atherosclerotic renal artery stenosis (ARAS). However, OFFICE blood pressure (BP) improvement as primary purpose was achieved in only 20-40% of patients performed PTRA. The purpose of this study was to clarify the effects of PTRA on BP response by 24-hour BP monitoring, and identify preoperative features that predict a sufficient BP response to PTRA.

Methods: Out of 1191 consecutive patients underwent coronary angiography, 505 patients with hypertension were followed by abdominal aortography for etiological screening of hypertension in a single cardiovascular center from Jan 2010 till Oct 2012. Among patients with angiographically significant stenosis, 30 patients with more than 20 mmHg translesional pressure gradient at renal artery under hyperemic condition were underwent PTRA. Ambulatory blood pressure monitoring (ABPM) was performed before and 1 month after PTRA, and patients were categorized as 'Responders' depending on average systolic BP decrease more than 10 mmHg. Physiological, echorenographic and hormonal parameters were retrospectively compared between Responders and Non-responders.

Results: There was no significant difference in BP at admission between 13 Responders and 17 Non-responders (systolic, 148 ± 18 vs. 145 ± 17, p=0.62; diastolic, 70 ± 9.3 vs. 68 ± 14, p=0.62; mean, 96 ± 7.8 vs. 93 ± 14 mmHg, p=0.55). Baseline BP on ABPM was significantly high in Responders (systolic, 148 ± 10 vs. 127 ± 16, p<0.01; diastolic, 80 ± 7.2 vs. 71 ± 8.3, p<0.01; mean, 102 ± 6.4 vs. 89 ± 10 mmHg, p<0.01). Even BP 2 days after PTRA was not different between the groups (systolic, 130 ± 19 vs. 133 ± 17, p=0.68; systolic, -19 ± 17 vs. -12 ± 15, p=0.31), Responders achieved 16 ± 6.7 mmHg decrease in systolic BP on ABPM 1 month after PTRA, did not in Non-responders (-6.9 ± 13 mmHg, p<0.01). On clinical backgrounds and prehospital medication, there was no statistical difference. Also, translesional pressure gradient at hyperemic condition detected by pressure wire was not statistically different between the groups (36 ± 32 vs. 30 ± 25 mmHg, p=0.60). In terms of echorenographic parameters, acceleration time (AT) at baseline was significantly LOWER in Responders (72 ± 19 vs. 92 ± 27 msec., p=0.028), yet other parameters including renal/aorta ratio (RAR), peak systolic velocity (PSV) or resistive index (RI) was not significantly different between the groups (RAR, 3.7 ± 1.7 vs. 3.7 ± 1.9, p=0.94; PSV, 218 ± 94 vs. 214 ± 91 cm/sec., p=0.90; RI, 0.8 ± 0.1 vs. 0.8 ± 0.1, p=0.56). Assessment of hormonal parameters suggested that either plasma renin activity (PRA), aldosterone concentration (PAC) or BNP was not preoperative predictor for BP response to PTRA (PRA, 3.8 ± 5.3 vs. 2.5 ± 4.9 ng/mL/h, p=0.50; PAC, 79 ± 29 vs. 56 ± 38 pg/mL, p=0.078; BNP, 80 ± 75 vs. 178 ± 200 pg/mL, p=0.10). However, interestingly, baseline renal function was significantly worse in Responders (serum creatinine, 1.47 ± 0.67 vs. 1.01 ± 0.34 mg/dL, p=0.021; eGFR, 36.0 ± 21 vs. 52.4 ± 22 mL/min/1.73m2, p=0.037).

Conclusion: The present study demonstrated that office BP did not represent patients' daily hemodynamic status, and high 24-hour BP was a potent predictor for sufficient BP response to PTRA. These findings may help clinicians to optimize risk-benefit profile of PTRA and reduce unnecessary intervention.

TCTAP A-107

Safety and Efficacy of True Lumen Tracking Recanalization for the Chronic Total Occlusions of Iliac and Femoral Artery

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Background: Chronic total occlusions(CTO) is still remains as one of the challenging lesion in the field of endovascular treatment(EVT). We aimed to investigate the safety and efficacy of EVT using true lumen tracking with 0.018 inch stiff guide wire for the CTO of the iliac and femoral artery.

Methods: From January 2008 to July 2013, consecutive 70 CTO of iliac (n=43) and femoral arteries (n=27) that performed EVT in our center were enrolled for this study. True lumen tracking using with 0.018 inch stiff guide wire under intravascular ultrasound(IVUS) guidance was attempted for all cases. The employment of bidirectional approach was left to the operator′s decision. Procedure success which defined as residual stenosis less than 50% with Thrombolysis in Myocardial Infarction(TIMI) 3 flow was investigated. The occurrence of thromboembolism and perforations related to procedure were investigated as the safety endpoint.

Results: TASC II TypeB/ C/ D were observed 31/ 5/ 34cases. Mean lesion length in iliac lesion and femoral lesion was 72.6 ± 37.7 mm and 78.0 ± 30.7 mm respectively. Bidirectional approach was performed for 27 cases. Successful guide wire crossing was observed for 37 cases(86.0%) of iliac lesion and 22cases (81.5%) of femoral lesions. Complete true lumen tracking was observed for 27cases (62.8%) of iliac lesion and 20cases (74.1%) of femoral lesions. No thromboembolism and one case of vessel perforation after stenting were observed. Procedure success was achieved 37 cases (86.0%) of iliac lesion and 22 cases (81.5%) of femoral lesions after further balloon angioplasty or stenting. Univariate analysis showed that the heavy calcification at the CTO site was significantly related to guide wire crossing failure. (26.3% vs 3.1%:P=0.009)

Conclusion: The true lumen tracking using with 0.018 inch stiff guide wire under IVUS guidance seems have acceptable safety profile and effective for successful recanalization of CTO of iliac and femoral arteries.