transfusion) occurred in the procedure. The rate of all-cause death was 7.2%. Restenotic lesions (p<0.004), chronic total occlusion (CTO) lesions, 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.

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**TCTAP A-106**

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

Kentaro Jujo, Ahsung Kim, Issei Ishida, Yuki Suzuki, Katsumi Saito
Nishihara Heart Center Hospital, Tokyo, Japan

**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 aortogram for ethical 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 transesophageal 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, echocardiographic 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 among the groups (36 ± 32 vs. 30 ± 25 mmHg, p=0.60). In terms of echocardiographic parameters, acceleration time (AT) at baseline was significantly LOWER in Responders (72 ± 10 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/s, 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. 36 ± 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.

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**TCTAP A-107**

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

Rie Sugawara, Ren Kawaguchi, Yusuke Miyashita, Hakaken Kan, Hiroshi Hoshizaki, Shigeru Oshima
Gunma Prefectural Cardiovascular Center, Maebashi, Japan

**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 Type B/C/D were observed 31/5/34 cases. Mean length in iliac lesion and femoral lesion was 72.6 ± 37.7 mm and 80.3 ± 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 22 cases (81.5%) of femoral lesions. Complete true lumen tracking were calculated for 27 cases (62.8%) and 20 cases (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 (91.5%) 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.