BACKGROUND The number of patients on hemodialysis complicated with critical limb ischemia (CLI) is increasing worldwide. Latest guideline points to life expectancy of <2 years as main determinant in revascularization modality selection (bypass surgery [BSX] or endovascular therapy [EVT]) in patients with critical limb ischemia (CLI). We compared clinical outcomes after EVT and after BSX, and examined predictors of 2-year mortality after revascularization in this setting.

METHODS This is retrospective multicenter study. From 2007 to 2009, 246 consecutive CLI patients on hemodialysis (age, 69±10 years; 70% male; 45% non-ambulatory status; 69% diabetics; 21% with rest pain; and 79% with tissue loss) who underwent revascularization for infragenual lesions (178 EVT and 68 BSX) were enrolled. Two-year amputation-free survival (AFS), overall survival (OS), major amputation (MA), and major adverse limb event (MAE: repeat EVT, surgical reconstruction, major amputation) were evaluated by Kaplan-Meier analysis. Predictors for 2-year mortality after revascularization were determined using a Cox hazards model.

RESULTS Two-year AFS, OS, MA, and MALE rates were not significantly different between EVT and BSX (60% vs. 52%, P=0.634; 70% vs. 67%, P=0.634; 70% vs. 67%, P=0.634; and 49% vs. 42%, P=0.634, respectively), which held after adjustment with covariates. However, death within 30 days was significantly higher after BSX than EVT (P=0.048). Predictors of 2-year mortality after EVT or BSX were age >75 (hazard ratio [95% confidence interval], 1.79 [1.09-2.91]), and albumin <3g/dL (2.09 [1.21-3.59]).

CONCLUSION After revascularization in CLI patients on hemodialysis, death rate within 30 days was higher in BSX than EVT; AFS, OS, MA, and MALE rates were not significantly different between EVT and BSX; older age and low albumin level were associated with 2-year mortality.

TCTAP A-175
Catheter-Based Renal Denervation Could Lower Blood Pressure As Early As One Month
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BACKGROUND Catheter-based renal sympathetic denervation (RDN) has been shown to reduce blood pressure (BP) in resistant hypertension. Cohort of Symplicity HTN-3 study revealed discrepancy of response between races. Our study was aimed to determine its efficacy in Taiwanese population.

METHODS Patients who received RDN and had office BP at baseline, 3, 6 and 12 months after treatment were enrolled. Ambulatory 24-hour BP monitoring (ABPM) and office BP at 1 month was also reviewed if available. Post procedure BP was compared to baseline. Number and location of ablation under fluoroscope were documented to determine its impact on BP lowering.

RESULTS 72 patients (mean age 57±11 years, 67% of male) had baseline office systolic BP 168±2 mmHg, diastolic BP 93±19 mmHg and mean of 4.6±0.1 antihypertension medications. 1 patient had major complication of vascular access hemorhage without further sequelae. Post procedure office BP were reduced by 21/5, 26/9, 23/9 mmHg at 3, 6, and 12 months (P<0.05, respectively). Among 36 patients with office BP at 1 month, 29 (81%) had >10mmHg of BP change and 22 (61%) had >20 mmHg. The response rate was seen persistently at 6 month. Fewer number of ablation was with less reduction in BP.

CONCLUSION For resistant hypertension, catheter-based sympathetic RDN could achieve substantial reduction in BP. The efficacy could be seen as early as one month.

TCTAP A-177
Multi-Slice Computed Tomography Coronary Angiography for Detection of Coronary Anomalies
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BACKGROUND Congenital coronary artery anomaly occurs infrequently in general population, and they are present at birth, but relatively few are symptomatic during childhood. Most coronary anomalies are discovered as incidental findings during coronary angiography. Their clinical relevance varies widely. They may be clinically silent and totally benign, or may cause many adverse clinical events and even sudden cardiac death resulting insignificant morbidity and mortality, even among young adults.1, 2 Cardiac catheterization has traditionally been indicated to demonstrate the coronary vasculature in detail and has remained the reference standard imaging modality. Owing to the potentially complex three-dimensional anatomy of the coronary anomaly, conventional angiography, not infrequently, incompletely delineates the anatomical course of the coronary anomaly (2). This study sought to determine the ability of MSCT to detect the origin and course of anomalous coronary artery.

METHODS From January 2007 to September 2010, we enrolled 16 consecutive patients primarily with suspected coronary artery disease