The predictors of wound healing were renal failure (p-value = 0.02, odds ratio = 0.61, 95% CI: 0.40-0.93) and Rutherford 6 (p-value = 0.05, odds ratio = 0.47, 95% CI: 0.22-1.03). The result of this study suggested that only baseline clinical characteristics were the predictor of wound healing in critical limb ischemia patients.

**TCT-527**

Obtaining of Wound Blush is The Most Important Angiographic Endpoint For Wound Healing

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**Background:** Several reports have been published of the acceptable patency and limb salvage rates following infra-popliteal interventions for the treatment of critical limb ischemia (CLI). However, the optimal angiographic endpoint of endovascular therapy (EVT) remains unclear. The aim of this study was to assess the relationship between the appearances of wound blush as an angiographic endpoint and wound healing in patients with CLI.

**Methods:** "Wound blush" was defined as contrast opacification of the vessels around the wound in final angiography of EVT through the catheter introduced into the popliteal artery. We analyzed the data of 185 limbs with ischemic ulcerations classified as Rutherford category 5 or 6, who underwent EVT alone, without bypass surgery. Patients were divided into two groups depending on whether or not wound healing was achieved.

**Results:** The overall wound heal rate was 73.5%. The rate of positive wound blush, patency of planter artery and the number of patent below the ankle vessels were significantly higher in the wound heal group than in no wound heal group. In the multivariate analysis, obtaining of wound blush was independent predictor for wound healing.

**Conclusions:** Presence of wound blush after EVT is associated with wound healing. Wound blush as an angiographic endpoint in EVT may be a novel predictor of wound healing in patients with CLI.

**TCT-528**

Differences in Long-term Outcomes After Endovascular Therapy for Femoropopliteal Artery Disease in Critical Limb Ischemia Patients With and Without Chronic Heart Failure

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**Background:** Clinical outcomes of endovascular therapy (EVT) for critical limb ischemia (CLI) patients with chronic heart failure (CHF) has not well investigated in real-world setting. The aim of this study is to examine differences in long-term outcomes after EVT for femoropopliteal artery disease in CLI patients with and without CHF.

**Methods:** From January 2004 to December 2011, a retrospective analysis was conducted of data from 13 Japanese cardiovascular centers. 899 CLI patients (1044 limbs, 59.0% men, 165 patients with CHF, 73.5% ± 10.2 years old) underwent EVT for de novo femoropopliteal lesions. The primary outcome measure was amputation-free survival (AFS). The secondary outcome measures were overall survival, limb salvage rate, freedom from major adverse cardiovascular events (MACE; all-cause death, myocardial infarction and stroke) and freedom from major adverse limb events (MALE; includes any repeat revascularization and major amputation). Mean follow-up of 46.9% ± 21.2 months.

**Results:** The AFS, overall survival, freedom from MACE and freedom from MALE rate at 4 years were significantly lower in the CHF group (42.0% vs 53.7% P < 0.001, 46.9% vs 58.2% P < 0.001, 34.8% vs 54.2% P=0.02 40.0% vs 54.9% P=0.01). Limb salvage rate was not significant difference between the groups. After correcting all end points with baseline variables, CHF was effective for worsening AFS (hazard ratio [HR], 1.42; 95% confidential interval [CI] 1.02-1.95; adjusted P=0.03) and freedom from MACE (hazard ratio [HR], 1.47 95% confidential interval [CI] 1.07-2.01; adjusted P=0.01). The others were no significant differences between the groups.

**Conclusions:** Chronic heart failure may worsen the AFS, and freedom from MACE after EVT for femoropopliteal artery disease in critical limb ischemia patients. CHF may be a risk factor for patients with critical limb ischemia.