TCT-782
Clinical impact of repeat infrapopliteal interventions for critical limb ischemia

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BACKGROUND
Though its patency rates are relatively low, endovascular therapy (EVT) has become a first line approach of revascularization in patients with critical limb ischemia (CLI). EVT for infra-popliteal lesions has a high rate of restenosis and requirement for repeat intervention; however, the clinical impact was not well characterized. The aim of this study was to assess the clinical impact after infra-popliteal EVT for patients with CLI.

METHODS
We retrospectively analyzed a multicenter database about CLI patients who underwent EVT for isolated infra-popliteal lesions from April 2004 to December 2012. Of a total of 1332 cases, 34 cases were excluded due to missing data on variables of interest. Consequently, 1298 limbs of 1065 patients were included in the current analysis.

RESULTS
The prevalence of tissue loss was 76% and 33% were accompanied by infection. Mean follow-up period was 1.7 ± 1.6 years, and 143 limbs underwent major amputations and 499 underwent repeat intervention. The Cox regression analysis revealed that repeat intervention was significantly associated with future risk for major amputation; the unadjusted hazard ratio was calculated to be 3.04 (95% confidence interval: 2.01 to 4.43). From the stratification analysis, repeat intervention significantly increased future risk of major amputation in cases with regular dialysis, whereas it did not in those without regular dialysis. From the multivariate analysis, repeat intervention in cases with regular dialysis independently increased the future risk of major amputation, whereas that in those without regular dialysis was not.

CONCLUSIONS
In the patients with CLI due to infra-popliteal lesions, requirement for repeat intervention was increasing the future risk of major amputation. However, this correlation was not applicable to non-dialysis patients.

TCT-783
Obtainment 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 optimal angiographic endpoint of EVT for wound healing.

METHODS
This was a subanalysis of prospective multicenter OLIVE registry assessing the patients who received infrainguinal EVT for CLI. We analyzed the data of 185 limbs with ischemic ulcerations classified as Rutherford category 5 or 6, who underwent EVT alone, without bypass surgery. The wound healing rate after EVT was estimated by the Kaplan-Meier methods. The association between final angiographic data and wound healing was assessed by the Cox proportional hazard model.

RESULTS
The overall wound heal rate was 73.5%. The probabilities of wound heals. Wound blush as an angiographic endpoint in EVT may be a novel predictor of wound heals in patients with CLI.

CONCLUSIONS
Presence of wound blush after EVT is associated with wound heals. Wound blush as an angiographic endpoint in EVT may be a novel predictor of wound heals in patients with CLI.