REDUCED AMPUTATION WITH SUCCESSFUL RECANALIZATION OF INFRAPOLITEAL CHRONIC TOTAL OCCLUSIONS IN CRITICAL LIMB ISCHEMIA

Poster Contributions
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Background: Infrapopliteal (IP) chronic total occlusions (CTOs) are common in patients with diabetes and critical limb ischemia (CLI). We analyzed clinical and procedural outcomes following endovascular intervention for IP CTO.

Methods: A single center retrospective chart review was performed on all CLI patients who underwent endovascular treatment for IP disease from 2006 to 2010. Patient and procedural variables were compared between IP CTOs and non-CTOs.

Results: Baseline characteristics and procedural variables are listed in the table. Among 365 IP interventions, 38% were CTOs. Mean CTO length was 100 mm and 25% had moderate to severe calcification. Successful recanalization was achieved in 80% of CTOs. When compared to non-CTOs, CTOs were longer, had a lower number of concomitant patent run-off vessel(s) and more likely to undergo laser atherectomy or stent deployment. Predictors of failure to cross a CTO included moderate-severe calcification (44% vs. 15%, p = 0.009) but not lesion length (103 vs. 108 mm, p = 0.8). One year target vessel revascularization (CTO vs. non-CTO, 21% vs. 14%, p = 0.2) was not significantly different. However, successful CTO recanalization resulted in lower one-year amputation rates when compared to unsuccessful CTO recanalization (p=0.005).

Conclusions: High procedural success and low complication rates can be achieved during recanalization of IP CTOs. Limb salvage rates are increased with successful canalization of IP CTO in CLI.