INTRAVASCULAR ULTRASOUND FINDINGS AND THE OUTCOMES FOLLOWING ENDOVASCULAR THERAPY WITH A DRUG-ELUTING STENT IN THE FEMOROPOPLITEAL ARTERY

Poster Contributions
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Background: Although a drug-eluting stent (DES) has become available for the treatment of femoropopliteal (FP) lesions, clinical outcomes and the factors associated with restenosis including intravascular ultrasound (IVUS) parameters following DES in FP lesions remain to be elucidated.

Methods: FP lesions in 89 limbs from 75 patients (age=71±7 years; male=76%) were treated with DES under IVUS guidance. Primary outcome including primary patency and freedom from clinically driven target lesion revascularization (TLR) were analyzed by Kaplan-Meier estimation. Restenosis (diameter stenosis >50%) was assessed with angiography at 12 months. Cox proportional hazards model was used to assess independent predictors of restenosis.

Results: The limbs included 28% critical limb ischemia, 20% in-stent restenosis and 29% TASC D lesions. Lesion length was 200±122 mm. Restenosis was observed in 24 limbs during the follow-up period of 327±94 days. Primary patency and freedom from clinically driven TLR at 12 months were 67% and 85%, respectively. In Cox regression analysis, minimum stent area (MSA) [HR, 0.85; P=0.022] and the number of antithrombotic drugs [HR, 0.43; P=0.050] were the independent factors associated with restenosis.

Conclusions: Primary patency at 12 months following DES in FP reached 67%. MSA by IVUS and the number of antithrombotic drugs were independently associated with restenosis.