IMPORTANCE OF OUT-PATIENT SURVEILLANCE FOR ACHIEVING LONG-TERM PATENCY AFTER PERCUTANEOUS REVASCULARIZATION OF LONG FEMORAL ARTERY DISEASE

i2 Poster Contributions
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Background: Percutaneous treatments are preferred therapies for revascularization of femoral artery lesions up to 100 mm in length, but surgical bypass is recommended for longer lesions. We assessed whether close out-patient surveillance for restenosis results in similar long-term outcomes after percutaneous revascularization of long compared to short femoral artery lesions.

Methods: A cohort of 134 consecutive patients receiving angioplasty or stenting in 171 limbs by Interventional Vascular Medicine specialists in two institutions were followed for up to 2.5 years. Event curves and survival analysis compared outcomes in three groups by lesion length (<100 mm, 100-200 mm, and >200 mm). Failed patency was defined as recurrence of symptoms, decline in ankle brachial index, stenosis by duplex ultrasound or need for re-intervention.

Results: Compared to lesions <100 mm, longer lesions had a higher failed primary patency (100-200 mm: HR=2.5, 95% CI 1.1-5.9, p=0.036 and >200 mm: HR=2.8, 95% CI 1.3-6.2, p=0.011), but had a similar long-term patency (Figure). The gain in long-term patency from repeat percutaneous intervention was higher for longer lesions, 24% for 100-200 mm and 20% for >200 mm, than lesions < 100 mm, (7%, p=0.032).

Conclusion: Surveillance and clinically guided repeat revascularization leads to progressive improvement in long-term patency particularly in the longest lesion lengths. This approach results in acceptable patency of long femoral artery disease treated percutaneously.