

AngioSculpt Pilot Study Summary

Restoring arteriovenous access: Pilot study using a scoring balloon in 50 patients

Study by Dr. J R Ross Journal of Vascular Access. September 16, 2020. doi:10.1177/1129729820949403

Key Takeaway:

 Results suggest that the AngioSculpt scoring balloon may be a viable treatment option for restoring stenosed arteriovenous (AV) fistula/graft access

Objective:

 Determine safety and efficacy of AngioSculpt PTA in restoring AV fistula/graft access and examine patency

Study:

- 50 patients with stenosed hemodialysis fistula/grafts treated with AngioSculpt
- Patients followed for six months
- Single-center prospective pilot study by Dr. Ross
- Lesions were short (mean: 4.56 mm)
- Investigator-initiated study, funded by Philips
- No randomized control groups

Results

- The study reported ~70% reduction of stenosis in AV fistulas/grafts immediately post-procedure
- Two- and six-month **patency rates** were **90.0%** and **80.9%**, respectively (studies for alternative forms of angioplasty report 50-60% patency rates)
- No slippage/dissections occurred
- No device- or procedure-related complications occurred through 30 days post-procedure

Procedural characteristics	Average
Six-month patency	80.9%
Pre-procedure stenosis	78 ± 13.4
Post-procedure stenosis	7.2 ± 7.6
Dissections (%)	0 (0%)
Slippage (%)	0 (0%)