EXPERIENCE TREATING IN-STENT RESTENOSIS LESIONS FROM A MULTICENTER REGISTRY

Poster Contributions
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Authors: Subhash Banerjee, Karan Sarode, Atif Mohammad, Osvaldo Gigliotti, Michael Luna, Tayo Addo, Mirza Baig, Shirling Tsai, Nicolas Shammas, Anand Prasad, Mazen Abu-Fadel, Andrew Klein, Emmanouil Brilakis, Veteran Affairs North Texas, Dallas, TX, USA

Background: In-stent restenosis (ISR) is commonly encountered during endovascular revascularization of infrainguinal arteries. However, limited data exists guiding operator decision-making.

Methods: We analyzed data for 1,056 procedures performed between April 2005 and August 2014 from the multicenter Excellence in Peripheral Artery Disease (XLPAD) registry.

Results: A total of 200 (18.9%) procedures treated ISR. Non-diabetic (47.2% vs. 57.5%; p=0.009) patients and women (n=48; 24.0% vs. 17.9%; p=0.048) were more frequently treated for ISR. Compared to those without ISR, average lesion lengths were similar (131.0±87.9 vs. 123.4±83.0 mm; p=0.312), with greater involvement of superficial femoral artery (SFA) (93.0% vs. 78.2%; p<0.001), and fewer chronic total occlusions (47.0% vs. 54.7%; p=0.05). Most ISR were treated without additional stents (58.3% vs. 45.1%; p<0.001), and higher atherectomy use (46.5% vs. 32.1%; p<0.001) compared to non-ISR lesions. Drug eluting stent (DES) use was higher in ISR (9.2% vs. 4.2%; p=0.018). Procedural success rates of ISR were similar to non-ISR lesions (94.4% vs. 93.7%; p=0.686), as were peri-procedural complication rates (6.6% vs. 4.1%; p=0.151) and need for repeat target limb revascularization (TLR; 18.5% vs. 13.7%; p=0.089). Stent thrombosis was higher in ISR lesions (Figure 1).

Conclusion: ISR is more frequently encountered in the SFA and is treated predominantly with atherectomy. However, DES are more frequently used in ISR lesions.