VIRTUS: EVALUATION OF THE VICI VENOUS STENT SYSTEM IN PATIENTS WITH CHRONIC ILIOFEMORAL VENOUS OUTFLOW OBSTRUCTION

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Venous Disease: Cyclical and Progressive
Risk Factors:
- Increased venous hypertension
- Valve reflux
- Valvular incompetence
- Inflammation
- Skin changes
- Ulcers
- Edema / Pigmentation / Ulceration

Characteristics of VICI Venous Stent
- Outward force
- Crush resistance
- Closed cell design to provide uniform shape and adequate wall coverage
- Minimal (10%-20%) foreshortening
- Flexible
- Permits repeated shortening, twisting, bending at groin
- Lengths: 60 mm, 90 mm, 120 mm
- Diameters: 12 mm, 14 mm, 16 mm
Nonthrombotic Iliac Vein Lesion (NIVL)

Pre-Stenting

Images courtesy of Peter Neglén, MD

Nonthrombotic Iliac Vein Lesion (NIVL)

Post-Stenting

Images courtesy of Peter Neglén, MD

Post-Thrombotic Obstruction

Pre-Stenting

Images courtesy of Peter Neglén, MD

Post-Thrombotic Obstruction

Post-Stenting

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VIRTUS Trial [NCT02112877]

Pre- and Post-Intervention Stenosis (n = 30)

- Pre-procedure lesion stenosis: 81.8 ± 23.3%*
- Post-procedure lesion stenosis: 8.1 ± 20.9%

* Pre-procedure target lesion stenosis for one subject was unavailable at the time of reporting

Discussion

Venous stents must resist...

- Compression
- Kinking
- Tapering
- Rigidity
Discussion1-4 (continued)

• External pressure much higher in veins than in arteries
• Limited available hemodynamic tests to assess for hemodynamically significant stenosis
• Morphological stenosis > 50% is considered significant

References