Recurrent non-malignant SVC in-stent restenosis treated with Culotte bifurcation stenting technique

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I do not have any potential conflict of interest
History

• 67 male with ESRF on hemodialysis since 2009 via right forearm AV fistula presents with progressive
  – Right arm & neck swelling
  – High venous pressure during dialysis

• Past history of multiple prolonged internal jugular central venous catheters
Right Brachiocephalic vein & SVC obstruction (Nov 2013)

- Incidence of SVC obstruction due to non-malignant diseases is rising
- Up to 70% on hemodialysis / history of central venous catheters
Venoplasty & Stent (Nov 2013)

Venoplasty±stenting has become first-line treatment for benign SVCO

- Wallstent (Boston Scientific) most commonly used but high rates of restenosis (40%), migration (20%) & delayed shortening (70%)

- Dedicated venous stents

Zilver Vena 16mm x 60mm (Cook Medical)
1\textsuperscript{st} Restenosis (Mar 2016)

- Recurrent swelling & high venous pressure on HDx
- Deformed & crushed stent at bifurcation
- Severe ISR
4mm, 9mm, 12mm, 14mm balloons
Extension of Stent across SCV bifurcation

Vici (Veneti)
- Closed-cell
- Increased radial strength & crush resistance
- Flexible
- 9Fr
- D: 12, 14, 16mm
- L: 60, 90, 120mm
2nd Restenosis (Apr 2017)

- Recurrent symptoms
1st Supera (Abbott) 7x40mm through Vici stent strut into SCV
2\textsuperscript{nd} Supera (Abbott Vascular) 7x60mm into Large collateral subclavian vein
Result (RAO)
6 month follow-up (Nov 2017)

- Asymptomatic
  - No swelling
  - Normal pressure on dialysis

- 6 month surveillance venogram showed moderate side-branch ISR at main-branch side-strut exit

8mm non-compliant balloon
Thank you