**Introduction**

- Scallops are a very important tool in treating complex aneurysms with FEVAR.
- Scallops allow the ability to access fenestrations from the upper extremity without opening device.
- Allow the ability to selectively stent vessels (Non seal zone).
- Safety.

**Pre-loaded catheters in PMEG**


**Type I Endoleak**
Custom Manufactured Device with Access Scallop/Pre-Cannulated Wires

Controversy

Universally or Selectively Stent SMA Scallop in a ZFEN case
Criteria for Selective Stenting of Scallops
- Misalignment of scallop determined by balloon testing
- Presence of scallop and single renal stent
- Presence of pre-existing visceral vessel stenosis in scalloped vessel

Follow-up Protocol
- POD#1: renal/mesenteric duplex, 4 view x-ray
- 1 month: CTA
- 3 month: renal/mesenteric duplex and 4 view x-ray
- 6 month: CTA
- 9 month: renal/mesenteric duplex and 4 view x-ray
- 1 year: repeat CTA
- 18 months: CTA and renal/mesenteric duplex and 4 view x-ray
- 24 months: CTA and renal/mesenteric duplex and 4 view x-ray
- Yearly: CTA and renal/mesenteric duplex and 4 view x-ray

Results
- 61 Zenith Fenestrated cases performed over study period
- Mean follow-up: 240 days (3-1157 days)
- 40 patients had at least one single wide scallop designed (66%)
- Most common configuration 2 renal small fenestrations and 1 scallop for SMA (33/40) 82.5%

Results
- Technical success and target vessel patency was 100%
- There were 27/40 scallops unstented (67.5%) and 13/40 patients that received a stent (32.5%)
- Hospital related mortality 1/40 (2.5%)
- 0% aneurysm related mortality

Complications
- Stented patients (1/13) 7.7%
  - Dissection of SMA treated with BMS extension at time of initial procedure
- Unstented patients (2/27) 7.4%
  - Patient 1: Post op nausea and elevated duplex velocities was found to have graft shuttering and underwent stenting with no further complications
  - Patient 2: Elevated velocities after losing 20 lbs by exercising over 1 year, asymptomatic
- No significant difference in complication rates

Conclusions
- Access Scallops may be useful in pre-cannulating fenestrations to help in FEVAR
- Selective stenting of visceral vessels in single wide scallops is safe in FEVAR during short and midterm follow-up, IF patients are CAREFULLY MONITORED
Conclusions

- Stenting all single wide scallops is not without risk
- Further validation needed with a multi-institutional trial as well as longer follow-up