Advantages of the Supera Interwoven Biomimetic Stent for treating femoropopliteal lesions with good 5-year Primary Patency even with long & calcified lesions

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Disclosure Statement of Financial Interest
Within the past 12 months, I or my spouse/partner have had a financial interest/arrangement or affiliation with the organization(s) listed below.

Affiliation/financial/relationship
- Grant/Research Support/Consulting Fees/Honoraria
- Company
  - Abbott Vascular; Bard Peripheral Vascular; Bentley; B Braun endovascular; Cardionovum; Cordis Cardinal Health; CTI; MD; Ivascular; Maquet Getinge group; Stille; Ziehm Imaging

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What with challenging lesions, like heavily calcified, in the femoropopliteal region?

Which stent to choose?
Supera Biomimetic Stent (Abbott Vascular)

Anatomical challenges of SFA & popliteal artery: how Supera deals with it

Axial Extension
Radial Compression
Torsion
Flexion

Case example

AURORAA Registry
Antwerp SUpeRa in POpliteal & SupeRFicial Femoral Artery
60 month data
- Physician initiated, single center, prospective
  - Start June 2010 - July 2011 117 patients
  - 88.89% involving distal SFA + popliteal
  - Highly diseased, heavily calcified lesions
    - TASC II C & D lesions
      - 58.12% calcifications
      - 47.86% stenotic disease
      - 52.12% occlusive disease

Patient Characteristics:
- Diabetes (type 1 & 2): 53.84%
- Rutherford 2: 2.56%
- Rutherford 3-4: 70.09%
- Rutherford 5-6: 27.35%

Mean lesion length: 143.43 ± 35.6 mm (30 – 320 mm)
Mean stent length: 157.86 ± 42.8 mm (6- 350 mm)
Mean number stents: 1.62
Mean number outflow vessels: 1.46

Post procedure:
- Flexion angio 90° & full flexion:
  - NO stent crush
  - NO flow compromising kinking

Post procedure: aspirin + clopidogrel (3mo)
Follow-up: 3, 6, 12, 18, 24, 36, 48, 60 months ultrasound
Death: 11

RX control @ 6 and/or 12 /24/36/60 mo
- +/- 50% of patients
- At random
- NO STENT FRACTURES
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Case example 2010

Case example 5 year later

IT WORKS !!

2010

2015

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Supera follow-up: AURORAA

calculated n = 68

6 m primary patency: 91.9\% 91.1\%
12 m primary patency: 80.8\% 79.4\%
18 m primary patency: 76.07\% 75.0\%
24 m primary patency: 73.5\% 73.5\%
30 m primary patency: 71.8\% 70.6\%
36 m primary patency: 70.08\% 69.1\%
48 m primary patency: 66.67\% 64.7\%
60 m primary patency: 63.25\% 58.82\%

DAWN

Dcb & Auroraa follow-up evaluation

Preliminary results

- Physician initiated, single center, retrospective evaluation
- Bare Balloon / DCB therapy & Supera stent as Bail out
- DCB: Legflow Cardionovum & Lutonix Bard PV
- 2 operators
- Start July 2014 - July 2016: at the moment: 54 patients
- 74.1\% involving distal SFA + popliteal
- Highly diseased, but less heavily calcified lesions
  - TASC II B, C & D lesions
  - ≥38.3\% calcifications (> 50% circumferential Ca)
  - 51.9\% stenotic disease (> 75%)
  - 52.12\% occlusive disease
Patient Characteristics:

- Diabetes (type 1 & 2): 48.14%
- Rutherford 2: 2 patients (3.7%)
- Rutherford 3-4: 42 patients (77.8%)
- Rutherford 5-6: 10 patients (18.5%)

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Supera follow-up: DAWN preliminary

- Mean lesion length: 187.8 mm (120 – 340 mm)
- Mean DCB length: 211.1 mm (150 – 370 mm)
- Mean Stent length: 197.6 mm (120 – 350 mm)
- Mean number DCBs: 2.1 DCB/pt
  - 27 Lutonix in 16 pts
  - 87 Legflow in 38 pts
- Mean number stents: 1.24 stents/pt
- Mean number outflow vessels: 2.07

Post procedure:
- aspirin + clopidogrel (3mo)
- Follow-up: 3, 6, 12, 18, 24, months ultrasound
- Death: 0
- RX control @ 6 and/or 12 mo
  - +/- 30% of patients
  - At random
  - NO STENT FRACTURES

n = 54
calcified n = 21

- 6 m primary patency: 94.44% (90.47%)
- 12 m primary patency: 88.96% (80.95%)

Conclusions

- Supera VMI mimics the natural anatomy, is dynamically conformable, adapts to its surroundings and adapts to the stresses placed on the stent this provides a structure which promotes maximum flow
- Short-Mid & Long-term results are very promising
- Combination of DCB & Supera stent as bail-out option seems to be beneficiary to the outcome

THE SUPERA stent can deal with challenging heavily calcified lesions
PROVEN LONG-TERM EFFICACY & DURABILITY
Thank You For Your attention