Stenting in SFA

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

- I do not have any potential conflict of interest
Figure 2: Amputation-free survival after bypass surgery and balloon angioplasty

Fem-Pop Stenting vs PTA

Martin Schillinger et al. Circulation. 2007;115:2745-2749
Challenging Anatomy
Segment below adductor hiatus subject to bend and kink

Femoral, Proximal SFA subject to kinking

Mid-Proximal SFA subject to compression

Distal SFA immobilized by adductor canal

Courtesy: Alexandra J. Lansky, Director, Interventional Cardiology Research, Yale University
Prevalence and Clinical Impact of Stent Fractures After Femoropopliteal Stenting

Dierk Scheinert, MD, Susanne Scheinert, MD, Jacqueline Sax, Christopher Piorkowski, MD, Sven Bräunlich, MD, Matthias Ulrich, MD, Giancarlo Biamino, MD, Andrej Schmidt, MD

Leipzig, Germany
Shortcomings of Bare Nitinol Stent

- Neointima Hyperplasia --- ISR
- Stent fracture
- Stent occlusion or thrombosis
DCB era

- Leave nothing behind
  - Preserved positive remodeling
  - Preserved elastic dynamic function
- Treating stent disadvantage zone
- Avoid relative stent complication
Around 22% re-stenosis

Shall we leave nothing behind?
RESILIENT: Freedom from TLR

18 months: Stent fracture : 4.1 %
Figure 1. Primary patency in superficial femoral artery stenting.
Supra stent

12 Month Data Across SFA trials by Lesion Length

- Primary Patency (K-M) %
- Mean Lesion Length (cm)

- Standard Nitinol Stents
- Supera
- Supera 500
- Supera 500 LL
- PTA

Graph showing data points for different stent types across lesion lengths.
Zilver PTX

Provisional Zilver PTX

84.9%

71.6%

$p = 0.06$

log-rank

Freedom from TLR

Years

Provisional BMS

Primary Randomization

Enrollment

PTA

Zilver PTX

Suboptimal PTA

Optimal PTA

Secondary Randomization

BMS

Zilver PTX
Viabahn

Function of stents

• Correct mechanical problem
  • Recoil
  • Dissection
  • Extravasation
  • Aneurysm
Decision of stenting

- Flow limiting dissection
- Pressure gradient guide
- Duplex spectrum guide
Role of SFA stent in DCB era

• Stenting or not
  • The patient and the lesion characters
• Bail out
  • Short spot stenting
Conclusion

• To stent or not is a still challenging issue in current period but **don’t be afraid**.
• To bail out means we still have to be **prepared**
• The choice of stent should be **individualized**.
• If long stenting is inevitable, **frequent monitor** is helpful to detect adverse stent complication
Thank You!
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