Different Techniques to Overcome Hostile Access Vessels and Secure Limb Perfusion

Thomas Larzon, MD, PhD
Dept of Cardiothoracic and Vascular Surgery
Örebro University Hospital, Sweden

LINC, 2016
Disclosures

I have the following potential conflicts of interest to report:

- Educational Program: W.L Gore & Associates
- Stockholder: LeMaitre
- Co-founder: Meliora-Vision
Problems

- Small diameter
- Tortuosity
- Calcification
Risk

- Rupture
- Dissection
Tug-wire technique
Pull NOT Push
Pull NOT Push
Pull NOT Push
Pull NOT Push
Balloon slide technique
Pull AND Push
Pull AND Push
No-oozing conduit
Stretch NOT Cut
Stretch NOT Cut
Stretch NOT Cut
Stretch NOT Cut
Conduit-free retroperitoneal access
Cover NOT Suture
Cover NOT Suture
When to use What

Tortuosity with light or moderate calcification and good size of EIA

TUG-wire
When to use What

Tortuosity with light or moderate calcification and tiny EIA

Predilatation and TUG-wire
When to use What

Light or moderate calcification and tiny EIA without tortuosity

Predilatation or balloon slide technique
When to use What

Heavy calcification and tiny EIA and light or moderate calcification of CIA

Standard conduit
When to use What

Heavy calcification and tiny EIA and heavy calcification of CIA

Conduit-free access
Long procedure time

- Jeopardized limb circulation due to large bore introducers with potential limb compartment syndrome
- Often in endovascular repair of TAAA were also proximal access is needed
INVOS

Monitoring of tissue oxygen saturation with near-infrared spectroscopy
Axillary conduit

Graft anastomosis
Axillary conduit

Graft anastomosis

Introducer(s) inserted through conduit
Axillary conduit

6F introducers in SFA
Axillary conduit

6F introducers in SFA  6F introducers in the conduit
Axillary conduit

Overview of set-up
Axillary conduit

Overview of set-up

Distal perfusion running
Conclusions

- With a portfolio of different access techniques in principle all access vessels can be managed.
- An axillary conduit serves as a valuable docking station in endovascular treatment of TAAA.
Thank you!
Different Techniques to Overcome Hostile Access Vessels and Secure Limb Perfusion

Thomas Larzon, MD, PhD
Dept of Cardiothoracic and Vascular Surgery
Örebro University Hospital, Sweden

LINC, 2016