Could we use atherectomy device at common femoral artery?

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Disclosure

Speaker name:

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
Classification of CFA lesions

- Type I: EIA extended to CFA
- Type II: Limited CFA
- Type III: CFA with bifurcation
- Type IV: Restenosis bypass anastomosis
CFA treatment guideline

• TASC II recommend surgical treatment (Level 4, Gr C)
  – Excellent success rate and long term results of Surgery


• However, morbidity with surgery is not negligible
  – ~ 5% surgical revision
  – ~20% minor complications

How about EVT of CFA lesions

- Conventional balloon angioplasty

- Bioabsorbable stents

- Both data showed poor outcomes

- What’s the problem?
  - High flexion of the vessel
  - Osteoid metaplasia -> heavy calcified lesion
  - Stent fracture
TECCO trial
Stenting or Surgery for De Novo CFA Stenosis.

What inhibits CFA stent

• Surgeon’s concern
  – Increasing future surgical interventions
    • In BASIL-I trial, 2\textsuperscript{nd} bypass after failed EVT was significantly amputation free survival and overall survival than 1\textsuperscript{st} bypass.
  – Limiting future access for EVT
  – Fracture of stent struts
Atherectomy and DCB

• Atherectomy
  – Lesion modification
  – Removal of calcification
  – Adjust vessel size ballooning

• Drug-Coating Balloon
  – Improving patency results
  – No stent material
Recent Data of Atherectomy for CFA

• DAART vs. DCB
  – Not significantly but higher primary patency in DAART (88% vs. 68%, p=0.4)
  – Both modalities had promising 12 month outcome (TLR 89% vs. 75%, p=0.98)
  

• DA vs. Balloon
  – DA may be a better alternative to angioplasty
  – Better results in bifurcated lesions or claudicant patients
  
Experience of My hospital

- 12 cases from 2018. 01
- Success rate: 92% (11/12)
- Failure case: 1 case wiring failure
- Complicated: 1 case ruptured
- Atherectomy device: Hawk series and Jetstream
- DCB: Lutonix and INpact
Case #1- Jetstream Atherectomy
Case #1- Jetstream Atherectomy
Case#2-Hawkone Atherectomy
Case#2-Hawkone Atherectomy
Case #3 rupture after DA
Case #3 rupture after DA
Case #4 wiring failure
Case #4 wiring failure
The Advices for EVT of CFA

• Case selection
  – Type I and II
  – Type III: short length and moderate calcification

• Intraluminal wiring – TruePath and IVUS

• Appropriate atherectomy: do not overshoot

• If failed EVT -> Consider surgical option
Thank you for your attention.