Rationale for extravascular ultrasound image-guided revascularisation

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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
Duplex Ultrasound to BTK Intervention

- Vessel size
- Optimal balloon angioplasty result
- Flow-limiting dissection
- High outflow resistance
- Final flow pattern
Use of Ultrasound in BTK angioplasty

POBA: 2.5 x 150 mm

RVD: 3.2 mm

Vessel size

Vessel lumen

Plaque burden

Media
Duplex Ultrasound may help in defining RVD and POBA/DCB size.

DCB has to touch and press the vessel wall.
Drug Transfer, RVD and Inflation

Pressure

3,5x300mm 18atm

Post DCB

6-month
Defining optimal balloon angioplasty
DCB after Optimal Balloon Angioplasty

Post procedure

6-month
Residual significant narrowing: Early patency scan necessary to support healing
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Functional evaluation of spiral dissection
Retrograde PTA recanalization
Early reocclusion by dissection flap: indication to angio and mechanical TLR
Mechanical TLR: repeat revascularization due to early reocclusion caused by dissection or thrombosis not restenosis
CONCLUSION

- Duplex ultrasound is a fundamental tool for diagnosis, treatment and follow up in peripheral intervention, particularly in BTK.
- DUS can provide correct RVD, POBA/DCB size.
- Optimal DUS after DCB seems to predict success on long term.
- Due to its safety can be use for patency surveillance and indication for reintervention.

So... get skilled !!!!