Pierce Technique In Critical limb Ischemia

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Disclosure

Speaker name: ..................................................................................

I have the following potential conflicts of interest to report:

☒ Consulting (Abbott- Boston Scientific)
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

☐ I do not have any potential conflict of interest
Medical history

• 83-year-old female
• Hypertension,
• Diabetes mellitus.
• Wounds in hallux on her left foot.
• She underwent Popliteal angioplasty w/stent with one run-off vessel (peroneal artery) 3 months ago, in another institution.
• No clinical improvement
Angiography:

Strategy: the target vessel was anterior tibial artery because the Dorsalis Pedis Artery.

Autoexpandible Stent 5 x 60 mm
Strategy

Evolution

• Multidisciplinary team decided on a new endovascular attempt in the below-the-knee arteries.
• Strategy: the target vessel was anterior tibial artery because the Dorsalis Pedis Artery as well as the arch had patency.

Procedural steps

• **A) Anterograde Approach:** ipsilateral common femoral 6 Fr.
  • Berestein Catheter 5F
  • Command 0.018"-300 cm
  • Victory 14 Guide Wire 0.014"-300 cm
• **B) Retrograde distal Approach** ""dorsalis pedis Artery"
  • Needle 21 G
  • Microcatheter CXI 14
  • Balloon 2.0 x 150 mm ARMADA 14
  • Balloon 2.5 mm x 210 mm ARMADA 14
  • Balloon SELUTION 3.0X 120 mm
We couldn’t cross the occlusion in the medial segment of the Anterior Tibial Artery.

Distal approach in the Dorsalis Pedis We could connect the two vias.

We tried to predilate the proximal anterior tibial artery in a heavy calcified lesion.

We failed to cross a coronary balloon 1.0 x 5 mm Terumo Ruyei).
18G needle at the proximal segment of the AT artery heavy calcified lesion

Armada 14 balloon 2.0 x40 mm

Armada 14 balloon 3.0 x150 mm
Wound healing

- Full pain improvement
- The patient underwent minor amputation

Two days

Two weeks

Three months
Conclusions

• The PIERCE technique is a useful tool to treat tight heavy calcified lesions and enhance the technical success rate.

• This method is simple and inexpensive.

• Although this is an aggressive technique, it has low rate of complications.
Thank you!!