Therapeutic solutions for SAD in CLI

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Solution of SAD in CLT: *Aggressive revascularization*

- CLTI Patients with SAD have poor outflow.
- Therefore, conventional (wound related) **one straight line method** sometimes insufficient for wound healing.
- It is impossible to restore the poor outflow itself.
- Aggressive revascularization,
  
  “as many as”, “as distal as” possible strategy may be final solution for CLI with SAD.

- Percutaneous DVA may be final option to **create outflow**.
Aggressive revascularization may improve the wound healing.

\[ P = 0.003 \]


Nakama et al Presentation@ LINC2017
80s female on dialysis, R5 with local infection
Conventional balloon angioplasty for ATA occlusion
Angiogram after balloon angioplasty

Incredible!!
Follow-up angiography before minor amputation

Toe amputation!
Follow-up angiogram after toe amputation
Plantar side wounds was not good...
SAD distribution... tiny metatarsal arteries were observed
Additional recanalization for PTA to plantar
Knuckle wire for lateral plantar
Distal PTA puncture and retrograde wiring
POBA to PTA and wiring to plantar artery
Final angiography

GOOD!!
Comparison before and
We cannot restore the poor “out flow” itself, but perfusion pressure may improve after the additional aggressive revascularization.
Patient clinical course is very well
Summary of Case overview

• CLIT patients with unhealed wounds
• After the conventional ATA (wound related artery) revascularization, minor amputation was performed for infection control.
• However, wound was not cured for 3 months due to SAD distribution (poor outflow)
• Additional PTA and plantar revascularization was performed for improvement tissue perfusion pressure.
• Clinical course was very well and complete wound healing was achieved in 3 months after the procedure.
CLI with SAD. Unhealed ulceration in her heal.

It’s a time to do pDVA

Nakama et al. JACC Cardiovasc Interv. Accepted 2020
pDVA: VIABHAN deployment & final angiogram

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Capillary vessels were visualized time by time

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<th>Just after pDVA</th>
<th>2 week after pDVA</th>
<th>4 week after pDVA</th>
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Nakama et al. JACC Cardiovasc Interv. Accepted 2020
Clinical course: wound healing within 4 weeks

Nakama et al. JACC Cardiovasc Interv. Accepted 2020
Conclusion

• For patients with BAD, conventional one straight lint method often sufficient.

• However, for patients with SAD, conventional revascularization sometimes insufficient. Additional revascularization may be needed.

• We performed additional tibial (and pedal) revascularization in patient with CLI patient due to SAD.

• Aggressive, additional tibial and pedal revascularization strategy is key to clinical success for CLI with SAD.

• When it fails... pDVA may be final option for creating new outflow.
Thank you for your attention

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