Late patency and limb salvage result after plantar and pedal loop PTAs for CLI: how do they differ in patients with gangrene and ulceration and those with rest pain.

1. Is foot vessel outflow important in CLI?
2. When to use the pedal-plantar loop technique?
3. Manzi’s examples of pedal-plantar loop
4. Long term result of the pedal-plantar loop technique

Late patency and limb salvage result after plantar and pedal loop PTAs for CLI

1. The disease of every above-the-ankle vessel segment has a weak association with CLI: we need many of them to get CLI
2. Below-the-ankle vessel disease has the strongest association with CLI, particularly the small vessel disease of the arch

Step-by-step approach in CTOs

- Antegrade approach
  1. Endoluminal
  2. Subintimal
- Retrograde approaches
  1. Pedal-plantar loop technique
  2. Trans-collateral approach
  3. Retrograde percutaneous puncture:
     • Retrograde pedal/plantar
     • Antegrade pedal/plantar
     • Retrograde digital/metatarsal
1331 patients with CLI (RTF 5-6, TcPO2< 30 mmHg)

- 135 (10.1%) treated with the pedal-plantar loop technique
- 85% acute success
- TcPO2 59±16 mmHg

Before applying the loop technique the operator must carefully analyze the vascular situation...

It is essential to emphasize that a direct blood flow through one tibial artery with a good distal distribution system into the foot vessels can be a good and conclusive result of the revascularization for the majority of the patients and that a good distal distribution system must always be respected and, if possible, not touched.

A different situation is the diffuse disease involving the foot vessels (desert foot), where opening the distal distribution system, if possible, becomes essential for wound healing.

The main difficulty of the pedal-plantar loop technique is to understand when it must be used because it is essential to emphasize that a good distal distribution system must always be respected and, if possible, not touched.

Use this technique only in case of severe foot vessel disease!

<table>
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<tr>
<th>Patient 1</th>
<th>Purulent plantar infection and osteomyelitis</th>
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<td>TcPO2: 30mg</td>
<td>After Surgical Drainage</td>
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Patient 1

TcPO2 = 51 mmHg

52 year-old man: diabetes; CLI (TcPO2 = 1 mmHg); TUC - 3C; forefoot gangrene

Patient 2

AVF

Patient 2
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Late patency and limb salvage result after plantar and pedal loop PTAs for CLI

36 months follow up:
- 85.7% Limb salvage rate
- 12.7% clinically driven redo-revascularization

Redo revascularization were more frequent in multilevel disease involving SFA/popl/BTK/BTA
The pedal-plantar loop technique is an essential tool in case of:
1. failure of the vascular distribution system of the foot
2. forefoot amputation separating dorsum & plantar vascular system

This technique has a good limb salvage rate and a low reulceration rate

THANKS FOR YOUR ATTENTION