Intraluminal guidewire passage and treatment is the best technique for most lesions: how to stay intraluminal and know it

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Endoluminal approach is our first line approach in every CTO, regardless of the length of the lesion

Is it possible to cross 30 cm of occluded vessel (ATA) drilling and pushing a hydrophilic, soft tip, 0.014” wire?

Technique to maintain the endoluminal position:
1. The “sliding” strategy
2. The “perforating” strategy

My explanation of this very frequent success in crossing long CTOs is that in many cases there must be a soft inner pathway into the occluded arterial lumen, surrounded by stiffer walls. A hydrophilic, soft tip, 0.014” wire is able to cross this pathway maintaining an endoluminal position.
LONG CTO EL Crossing, Perforation and Rescue

- TUC Dr. First Toe, 12 Fifth Toe

LONG CTO EL Crossing: Perforation and Rescue

What to do in case of failure of the endoluminal approach?

- Short CTO
  - Long CTO
  - Go subintimal !!!

Technique to maintain the endoluminal position:
1. The "sliding" strategy
2. The "perforating" strategy

In case of short CTOs, where the distal open lumen is clearly visible few cm below, we prefer to pursue the endoluminal approach.

Why?
Because the first commandment of endovascular treatment is
"You shall not touch what is open and functioning!"

Hydrophilic, soft tip, 0.014" wire

CTO dedicated, stiff tip, 0.014" wire
In focal lesion the endoluminal approach guarantees a “focal” treatment, preserving patent vessel segments and collaterals.

Step-by-step approach in CTO crossing strategy

- Antegrade approach
  1. Enlumina
  2. Support
- Retrograde approach
  1. Pre-luminal loop technique
  2. Peripheral atherectomy

Tips and tricks for a correct endo approach.

No data about real superiority of ENDO or SUBI in terms of clinical outcomes and patency.

We proposed to combine all these strategies (SUBI, ENDO, antegrade-retrograde) for improving our success rate in endovascular treatments of CLI pts.

Better ENDO or SUBI?

- Failures: SI-EL
- No differences in outcomes

Combined Percutaneous Selective and Endoluminal Angioplasty for Ischemic Lower-Limb Ulcers in Diabetic Patients: 5-year Practice in a Multidisciplinary "Diabetic Foot" Service

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