## Breakfast Meeting – BTK Intervention My Best Brilliant Techniques for Saving Foot

# Retrograde Approach Using Plantar Arch Pathway

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## Wiring techniques for BTK-CTO

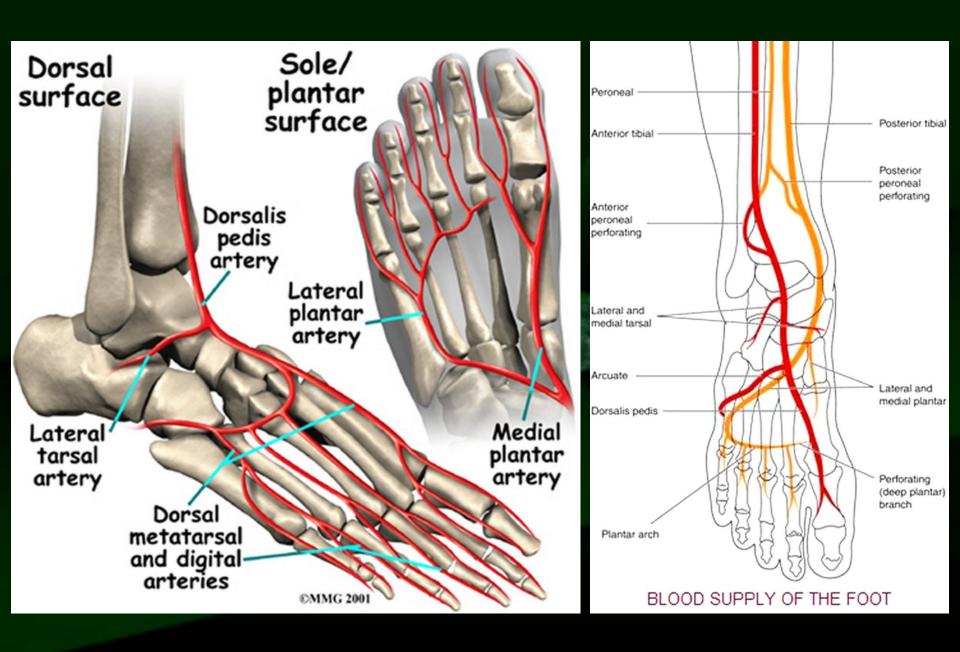
- 1. Antegrade wiring
- 2. Bi-directional wiring with distal puncture

Dorsalis Pedis distal ATA distal PTA distal PA Plantar artery Digital arteries

3. Bi-directional wiring using collateral channel

Trans-collateral angioplasty (TCA)

Pre-existing collateral channel = pedal arch



#### Case 1

Case: 80's Male

Diagnosis: CLI (Rutherford 5)

Risk factors: Hypertension

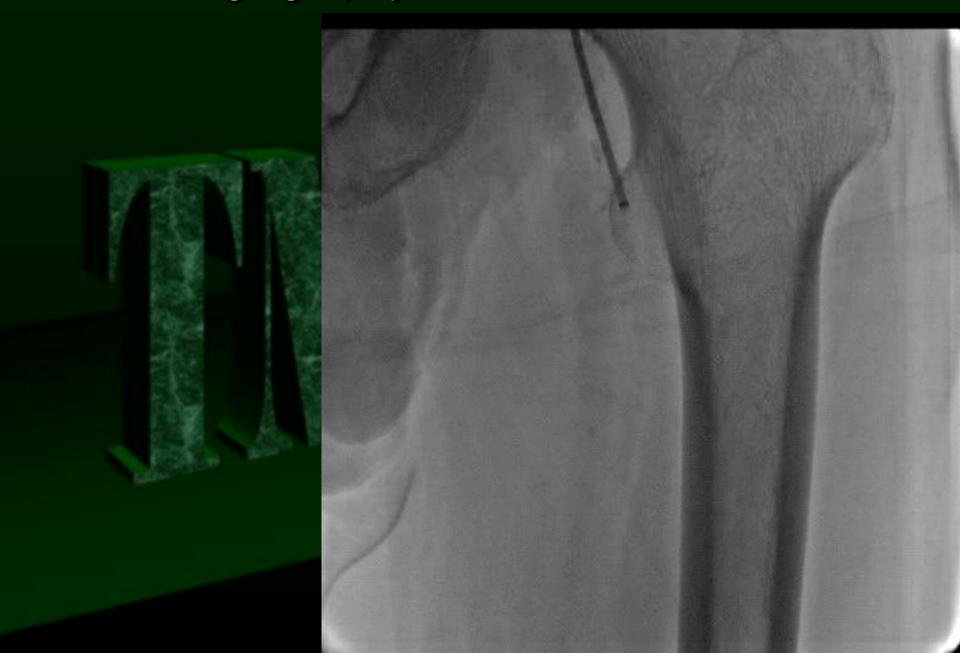
Diabetes Mellitus

Dyslipidemia

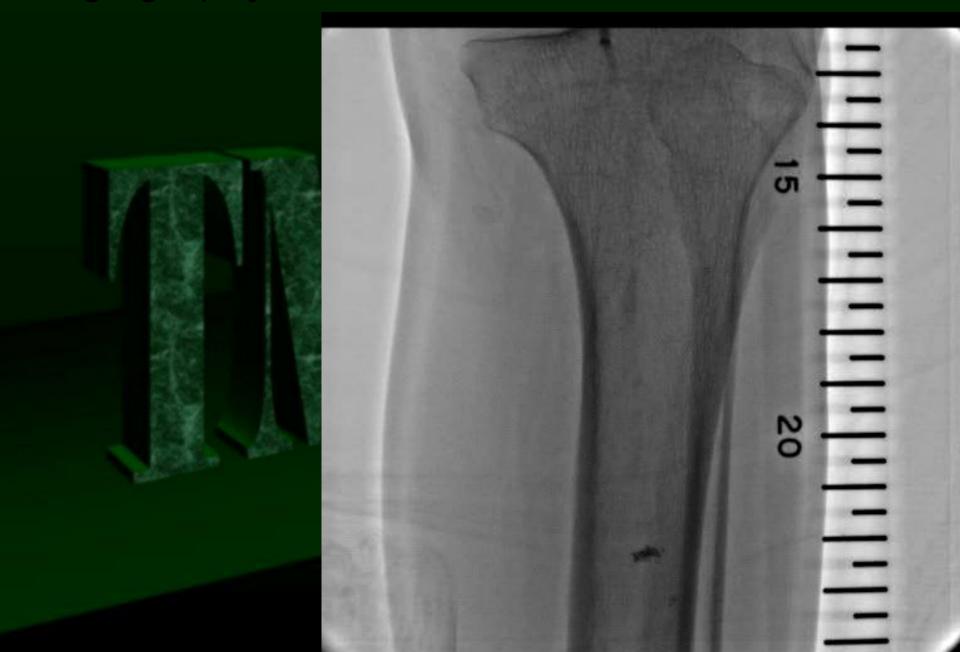
Ischemic Heart Disease (PCI)

Foot lesion: Ulcer at 1st toe

## Control angiography



## Angiography of BTK level

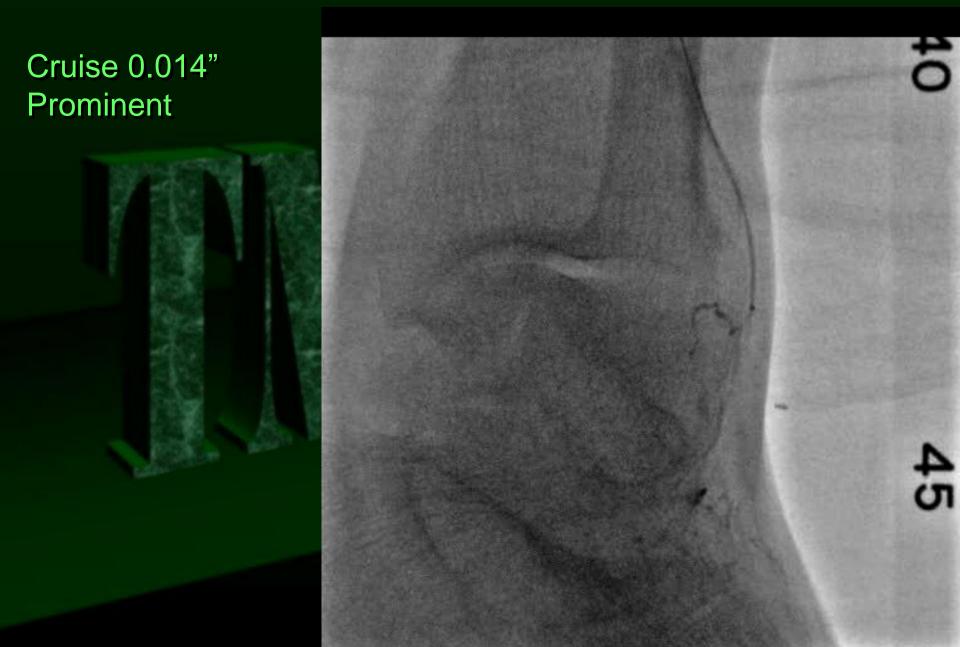


#### Selective angiography from distal peroneal A.

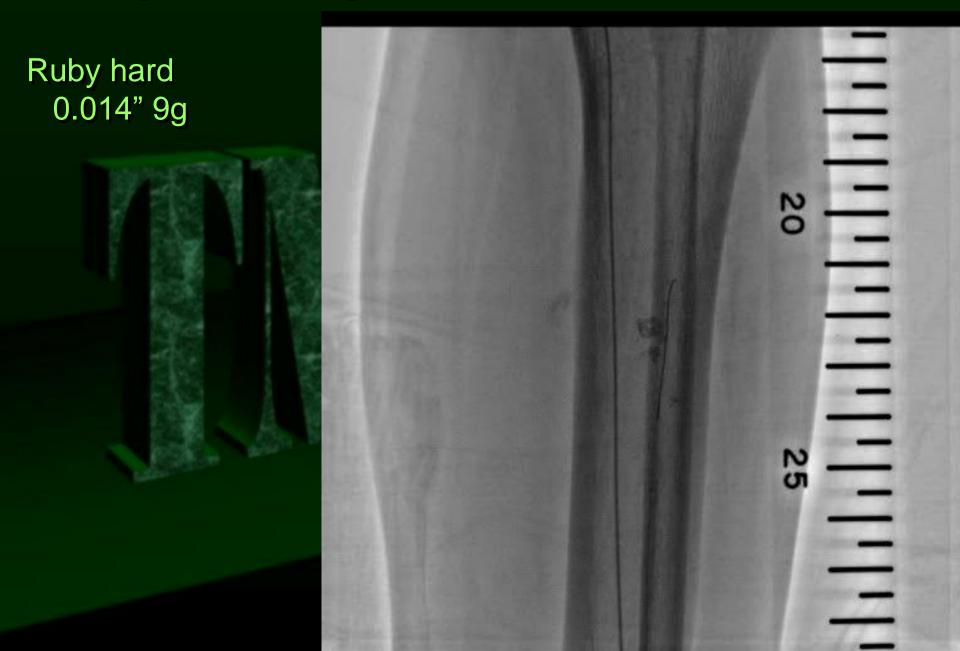
There is a fine collateral channel connecting PA and Dorsalis.



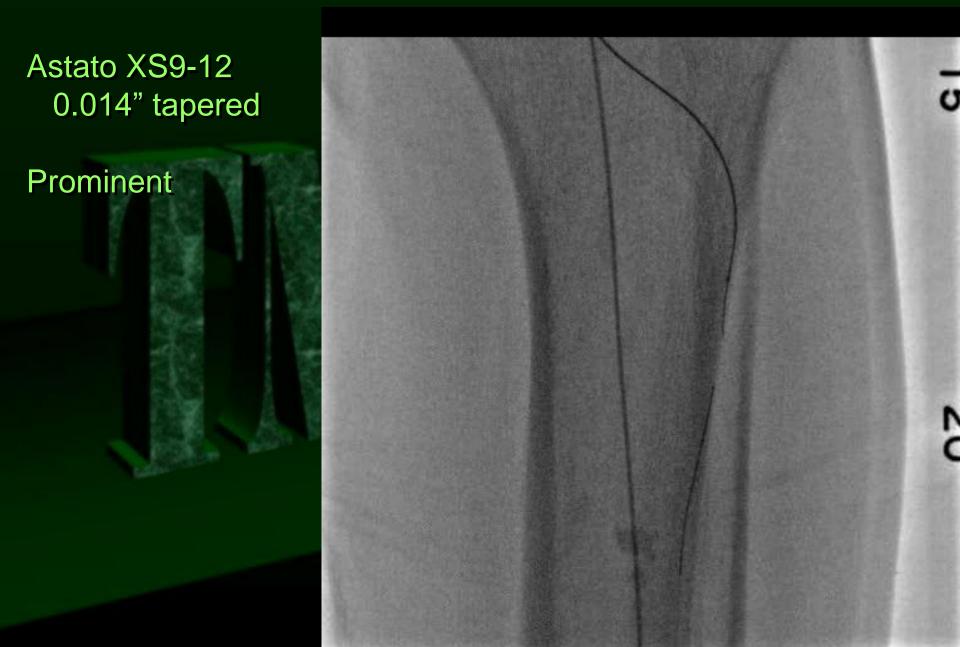
#### Advance wire into a collateral channel to DP



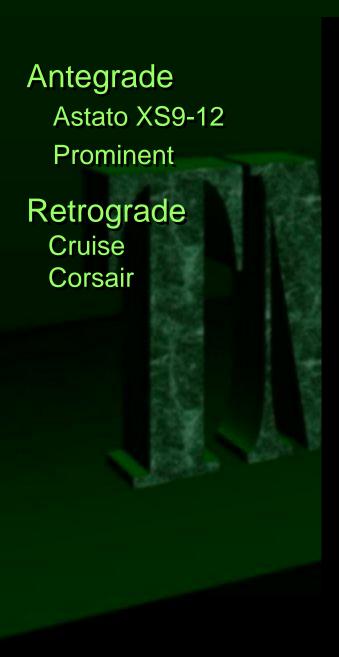
#### Retrograde wiring into the ATA-CTO

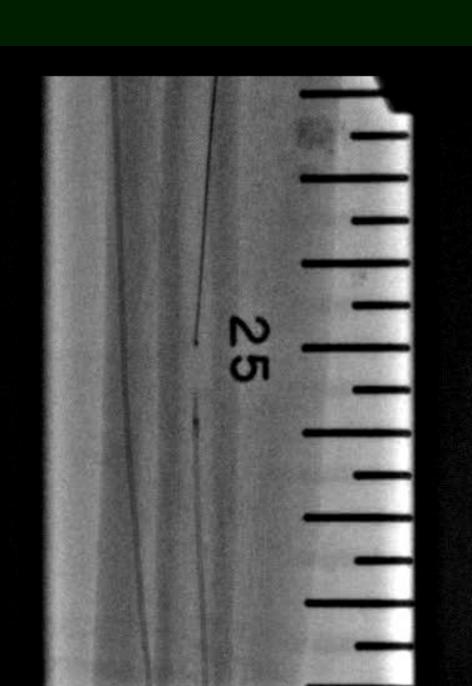


#### Antegrade wiring for the ATA-CTO

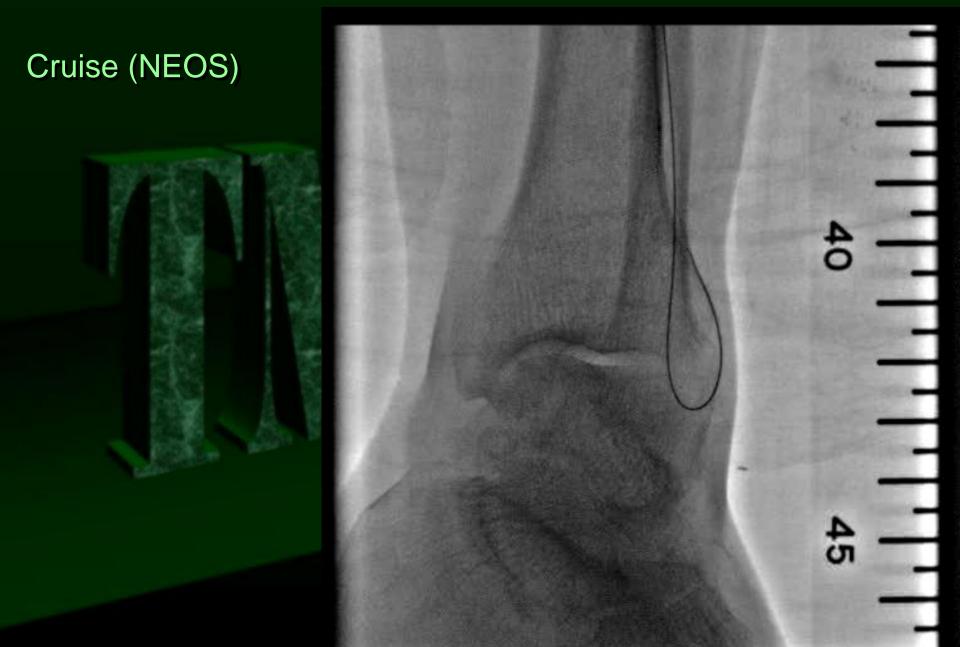


#### Wire Rendez-vous





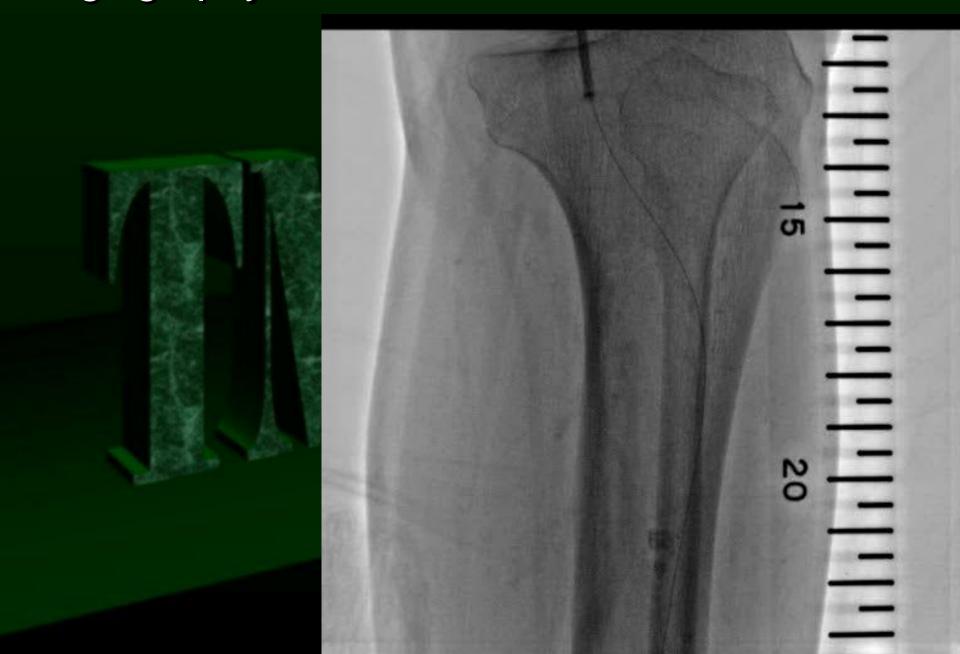
#### Advance antegrade guidewire into the DP, ATA



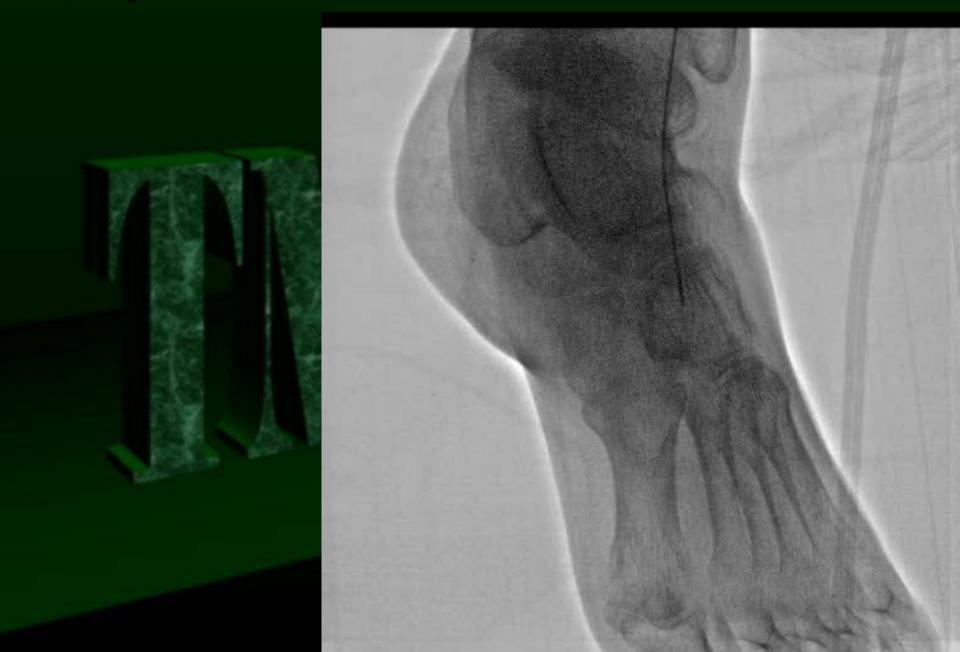
## POBA for ATA-CTO



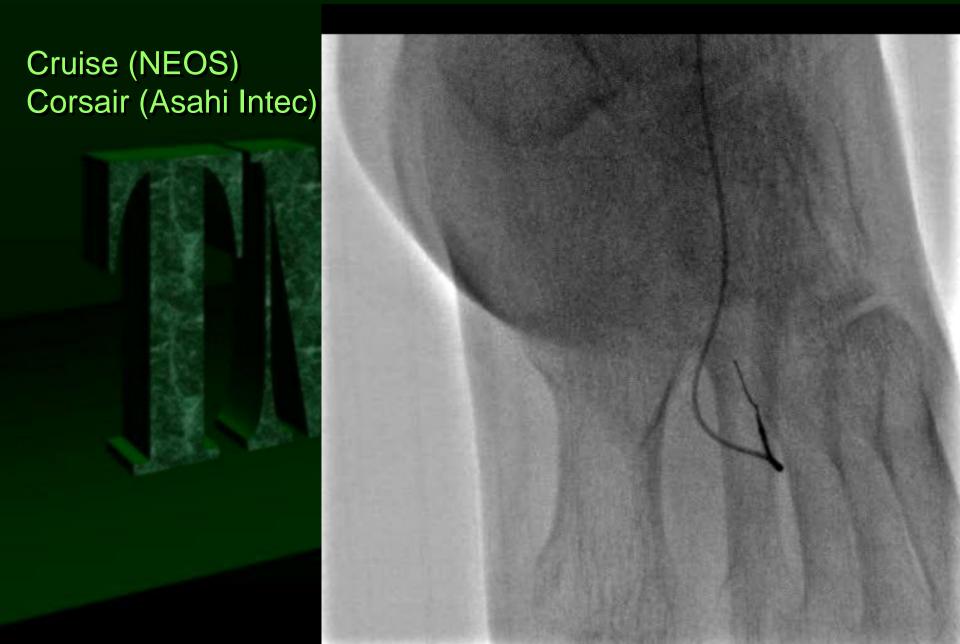
## Angiography after POBA for ATA-CTO



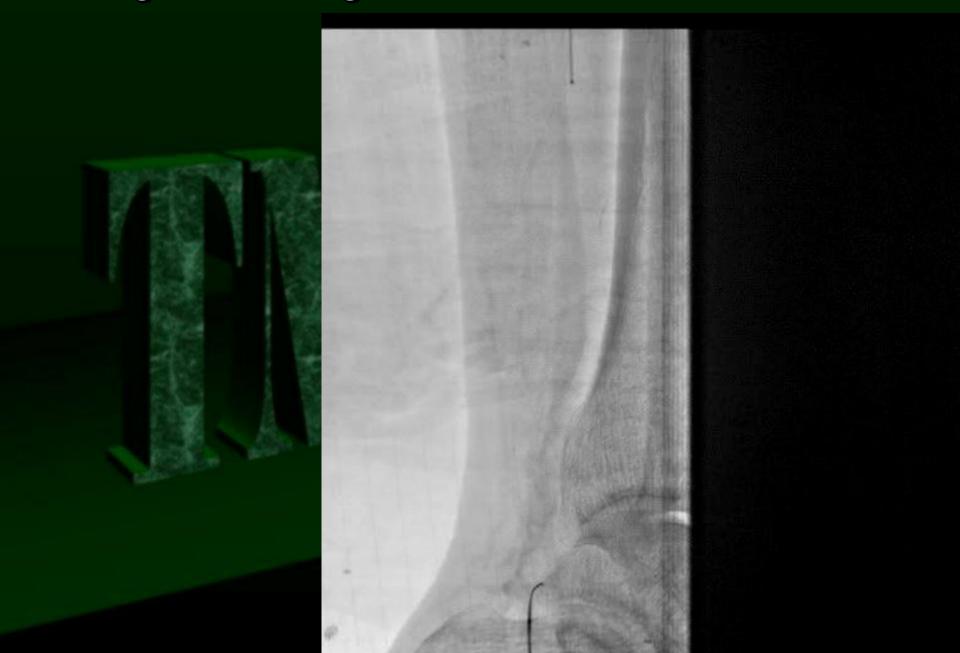
## Tip injection at DP



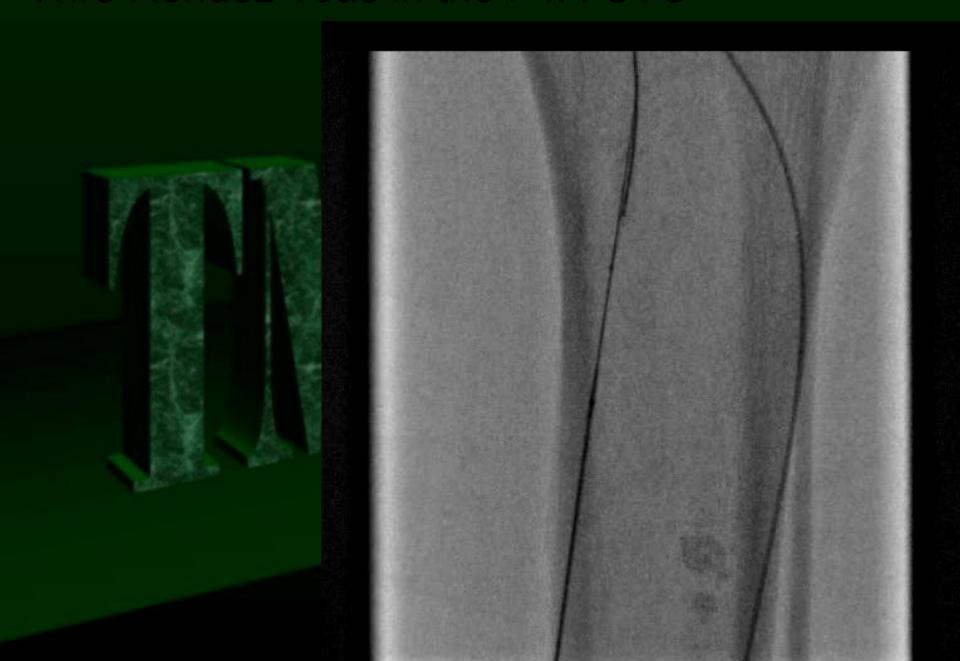
#### Advance guidewire to lateral plantar A.



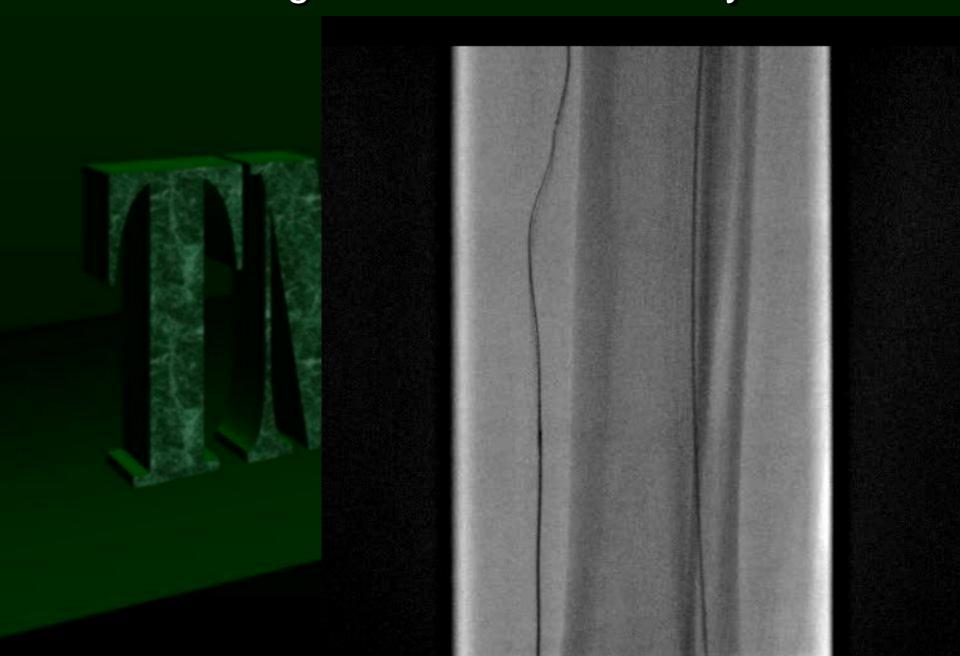
## Retrograde wiring for PTA-CTO



#### Wire Rendez-vous in the PTA-CTO



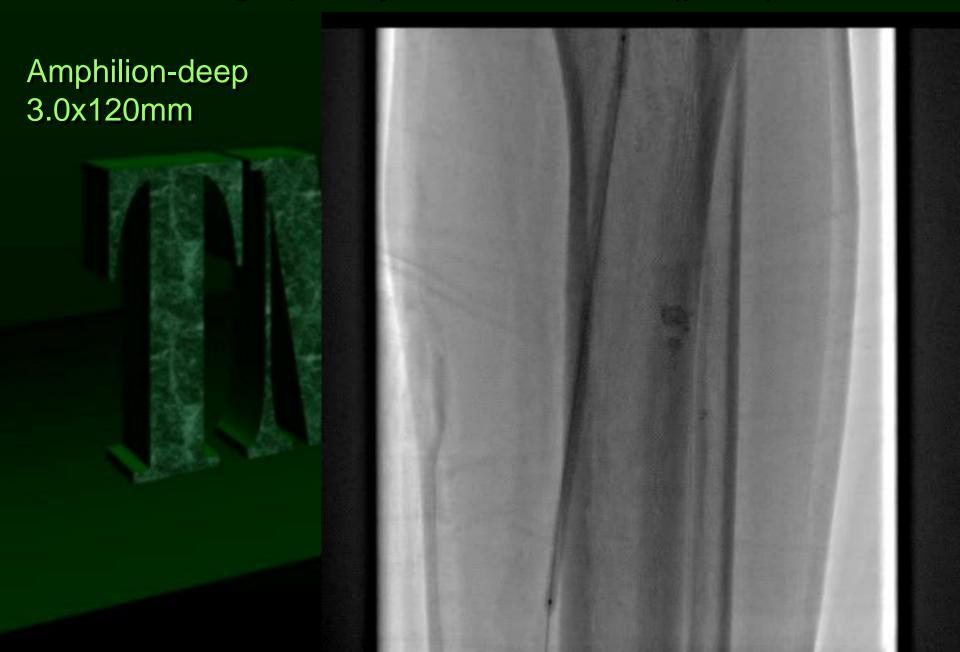
#### Advance antegrade microcatheter beyond CTO



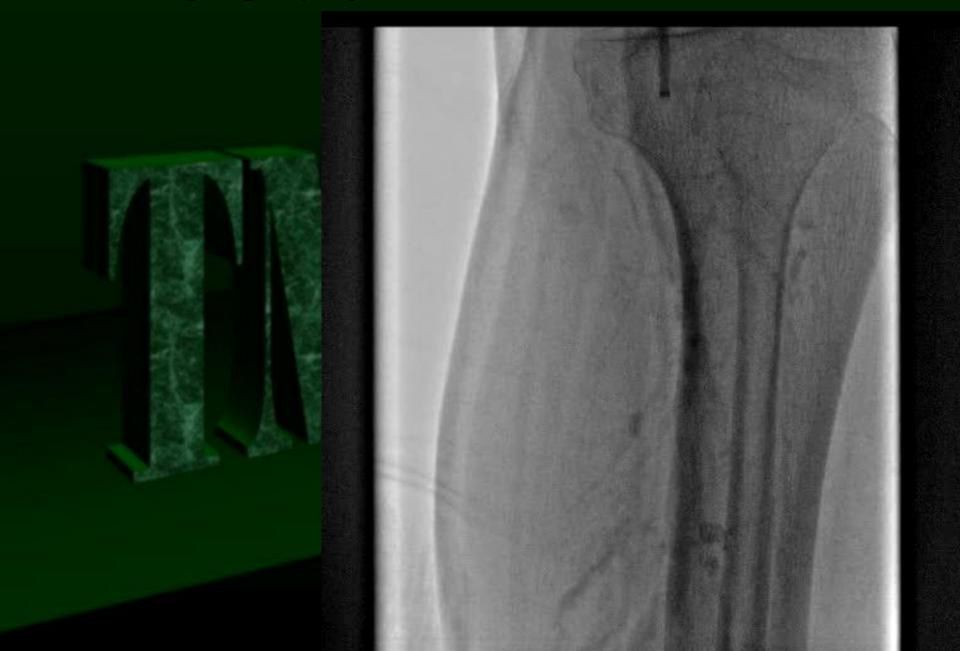
## Balloon angioplasty for PTA-CTO



## Balloon angioplasty for PTA-CTO (prox)



## Final angiography



#### Case 2

Case: 80's Male

Diagnosis: CLI (Rutherford 5)

Risk factors: Hypertension

Old cerebral infarction

Parkinson's disease

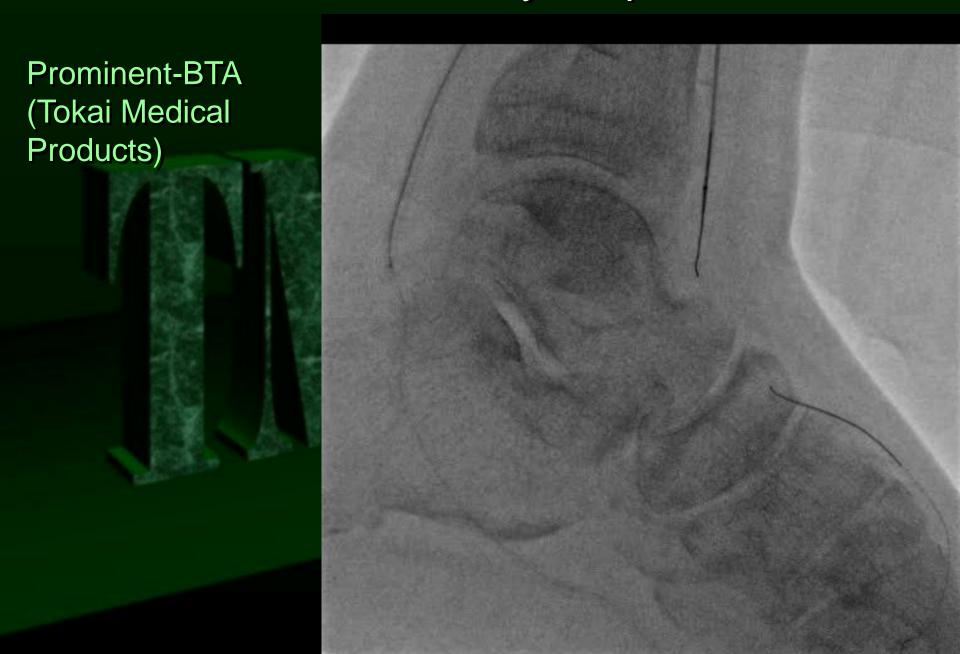
Aortic stenosis

Foot lesion: Ulcer at 1<sup>st</sup> and 2<sup>nd</sup> toe

## Control angiography

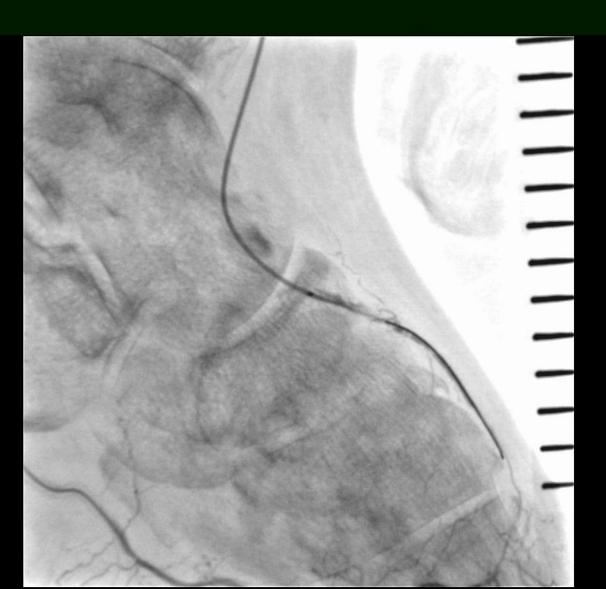


#### Advance microcatheter beyond pedal arch



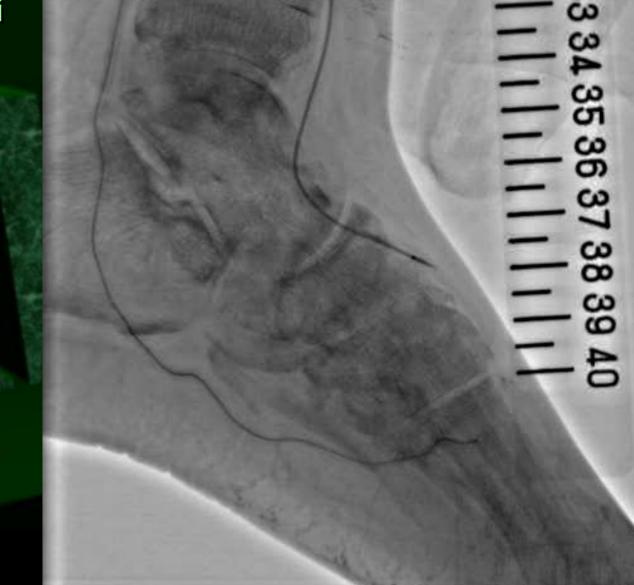
#### Advance antegrade guidewire

Tip injection from Prominent-BTA provided an excellent guidance for the antegrade wiring.



#### Tip injection from antegrade microcatheter

Corsair-PV (Asahi Intec)



## Balloon angioplasty of DP and distal ATA

Shiden 2,0x200mm (Kaneka)





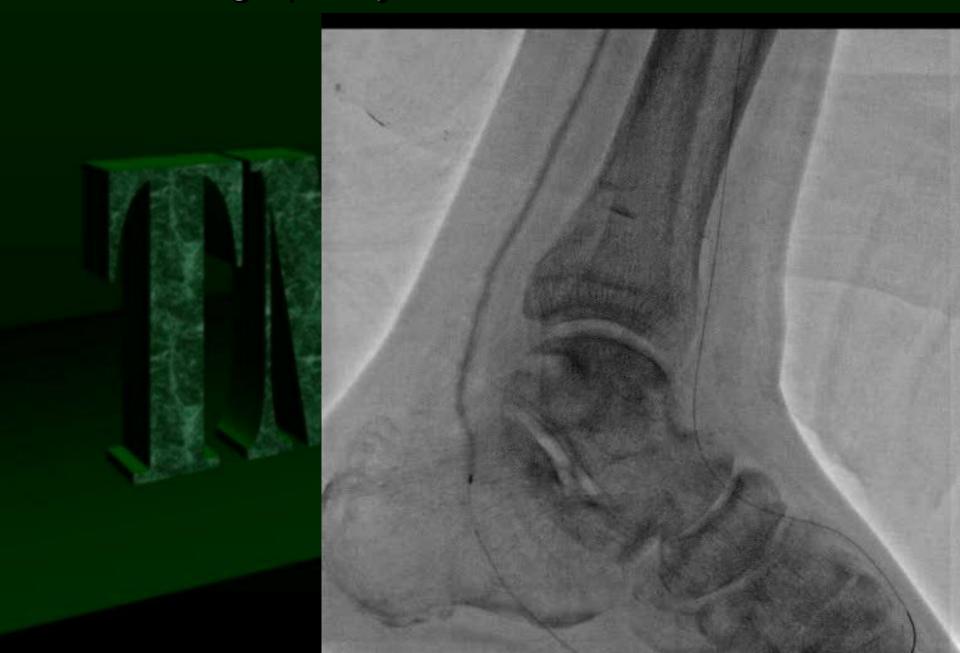
#### Balloon angioplasty of proximal ATA

Shiden 2.0x200mm (Kaneka)

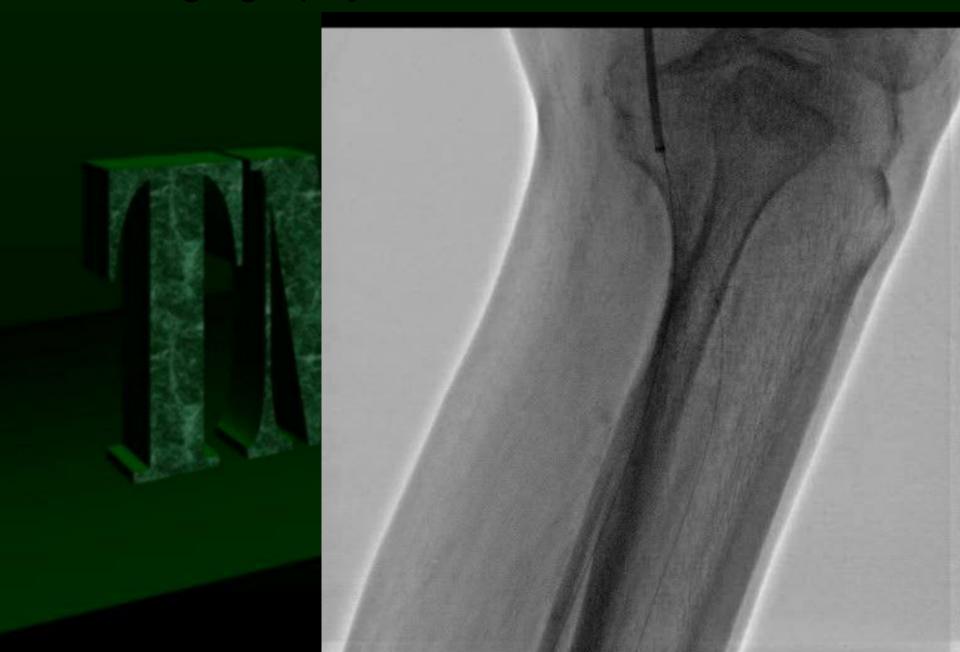




## Balloon angioplasty of PTA



## Final angiography



#### Case 3

Case: 80's Female

Diagnosis: CLI (Rutherford 5)

Risk factors: Hypertension

Diabetes Mellitus

Dyslipidemia

Ischemic Heart Disease

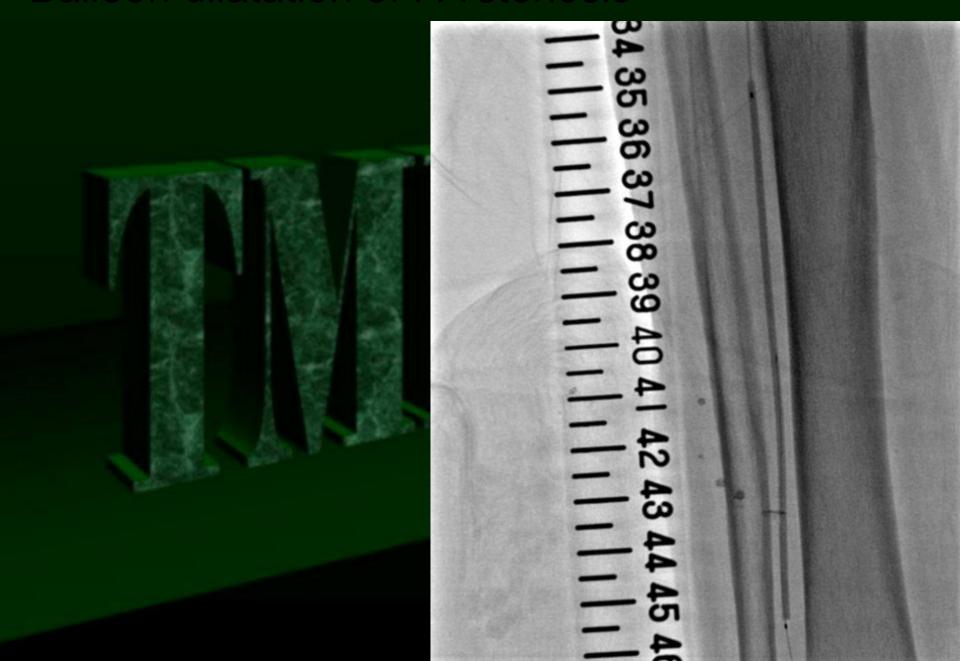
Foot lesion: Ulcer at 1st toe

#### Control angiography



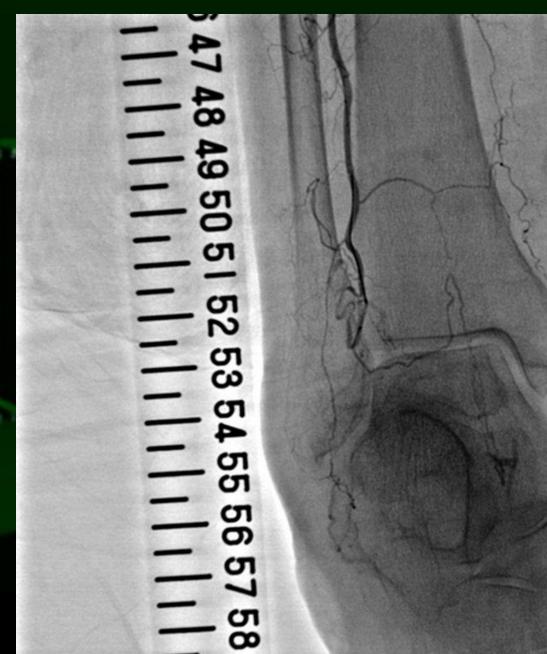


#### Balloon dilatation of PA stenosis



#### Angiography after PA dilatation

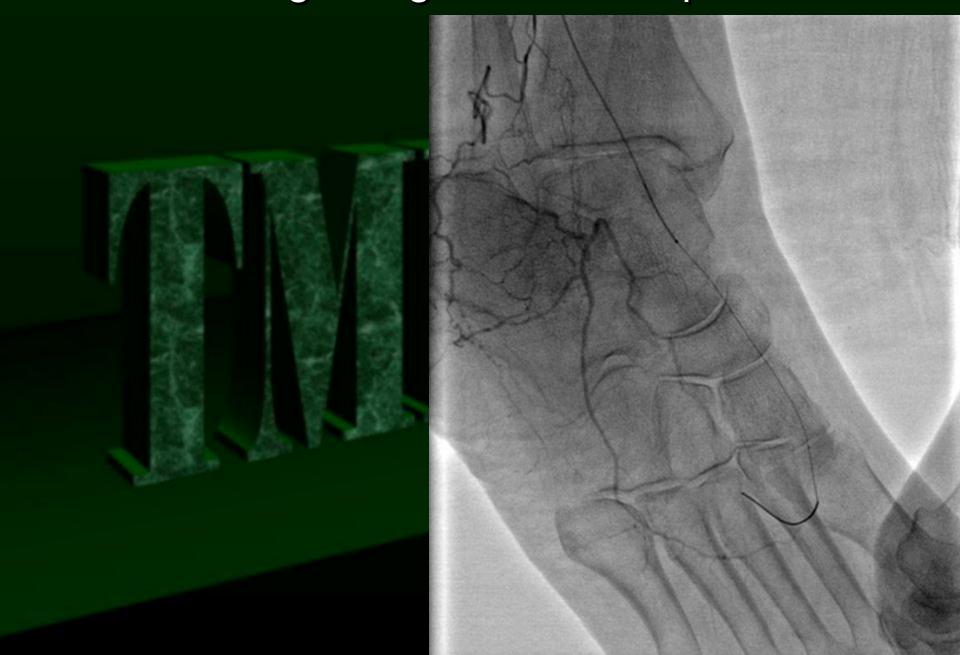
Increased collateral flow provides better view of BTA area.



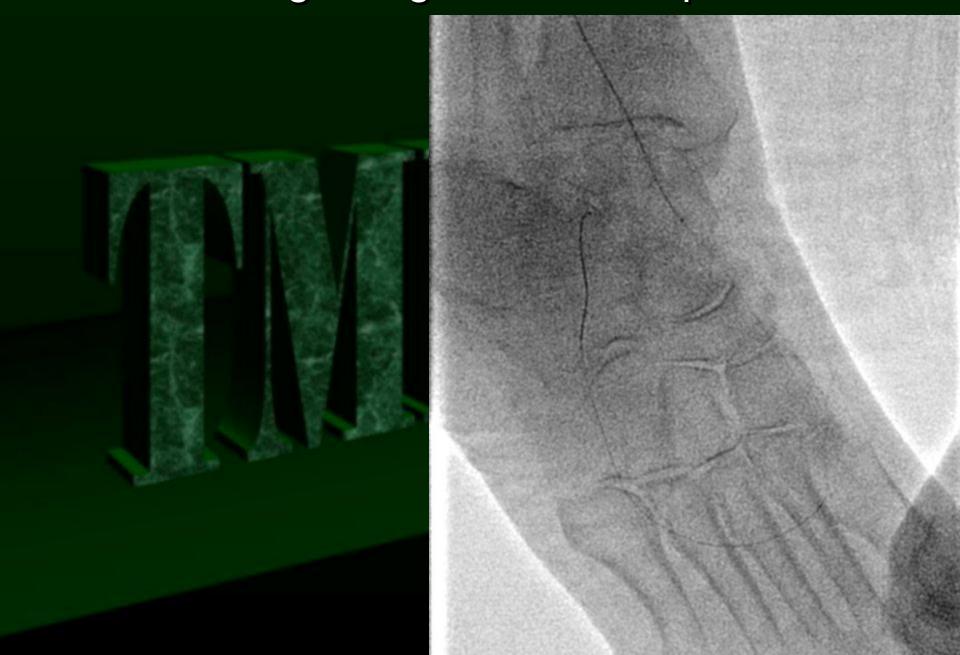
#### Antegrade wiring for ATA-CTO

Under the guidance of contrast injection from the microcatheter at distal PA.

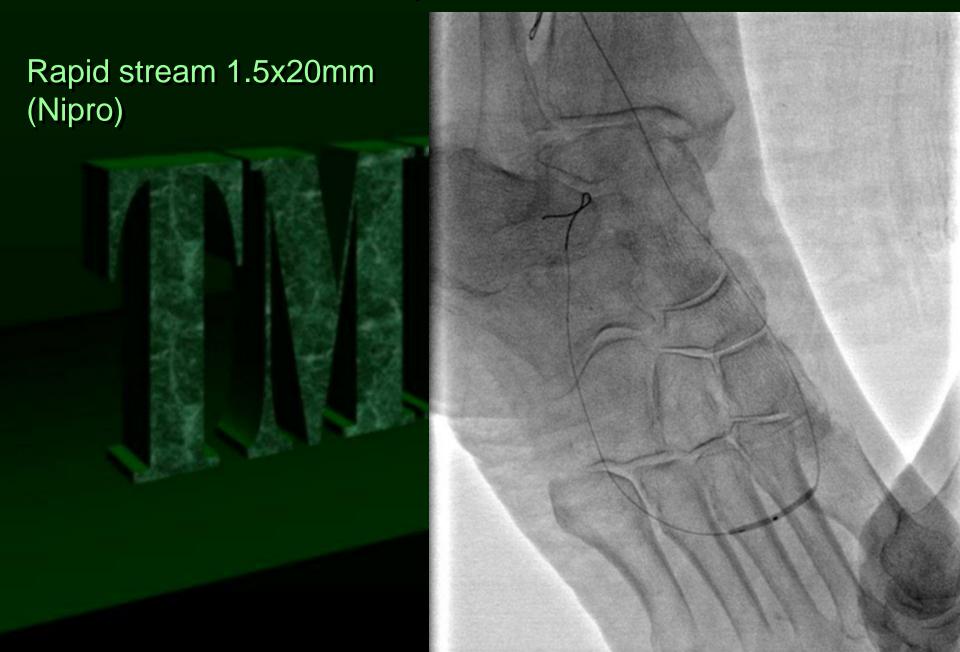
## Advance antegrade guidewire into pedal arch



## Advance antegrade guidewire into plantar A.



## Balloon dilatation of pedal arch



#### Balloon dilatation of ATA / DP – CTO

Amphirion-deep 2.0x120mm (Invatec)

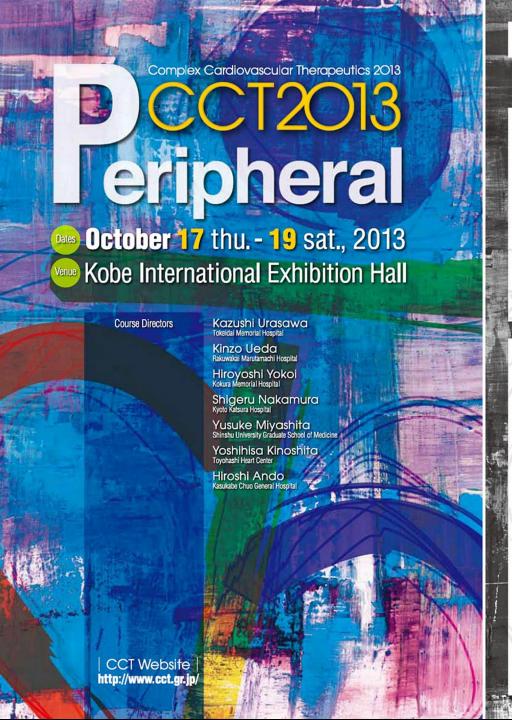
## Final angiography



## Summary

Pedal arch is a pre-exiting communication vessel which connects anterior tibial and posterior tibial artery.

If one tibial artery remains open, it should be used for sending retrograde guidewire to the opposite occluded tibial artery.





would like to greet you on behalf of CCT 2013 peripheral course directors.

n recent years, I feel that the field of endovascular treatment (EVT) in Japan has accomplished a giant leap. The reason for this is that the devices for peripheral intervention have rapidly progressed while the large amount of cardiologists who have acquired the technique of Percutaneous Coronary Intervention (PCI) has converted themselves to peripheral intervention arena. In addition to the conventional 0.035 and 0.018 inches wire system, the introduction of the 0.014 inches wire system used in PCI to EVT has enabled us to use new techniques such as Trans-Collateral Angioplasty (TCA), direct superficial femoral artery puncture, tibial puncture and so on. The standardization of EVT strategy in consideration of the peculiarity of blood vessel treatment has surely advanced, too. Based on this, the success rate of EVT regarding Transatlantic Inter-Society Consensus (TASC) D lesions in iliac arteries and superficial femoral arteries (SFA) is close to almost 100 percent in many cathe-labs in Japan. The introduction of new devices such as Drug-eluting balloon (DEB) and debulking devices are definitely in demand in order to improve the long-term results of EVT for PAD patients.

In CCT Peripheral 2013, the best of the best Japanese operators will be in charge of the EVT Live Course for two days for the further spread and development of the EVT techniques. We will offer the latest information from the foreign countries in the Fireside Seminars and Luncheon Seminars. Moreover, we plan to have a lot of Morning Seminars for the physicians who want to start the peripheral artery treatment from now and those who want to improve their techniques in order to adapt their interventional skill to more difficult cases.

e are looking forward to a lot of physicians participating in CCT Peripheral 2013 (October 17-19, 2013) and being able to experience the progress of endovascular therapy for peripheral vascular disease.

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