

# *CLI Therapies – LINCCed !*

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## *HOW TO ADMINISTER A POPLITEAL NERVE ANAESTHESIA BEFORE AN INTERVENTION*

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# Disclosure

Speaker name:

**Steven Kum**

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)
  
- I do not have any potential conflict of interest

# Utility of Nerve Block for Peripheral Intervention

## 1. *Facilitating Intervention*

### – Pain control

- CO2 angiogram
- Retrograde access (Open or percutaneous)
- High pressure POBA
- Fasciotomy
- Simultaneous wound debridement

– Paralysis (No movement of ankle and most of knee) → better pictures

## 2. *Post procedure analgesia*

# Intervention and Debridement in Hybrid room

- Nerve block administered before intervention



# Immediate debridement and minor amputation after LimFlow wth Popliteal Block



# Anatomy and Coverage

Figure 20-1

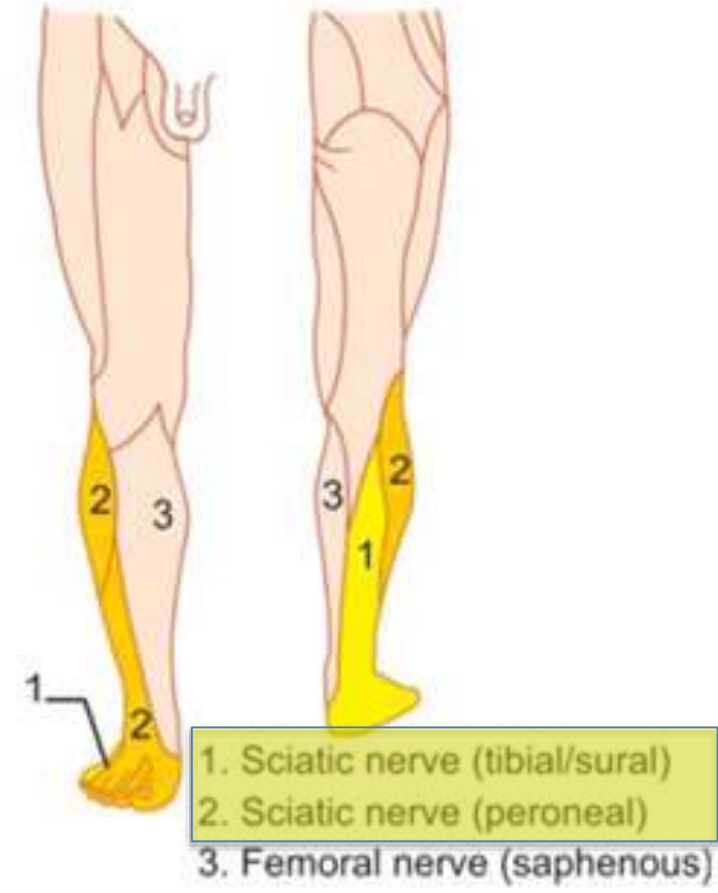
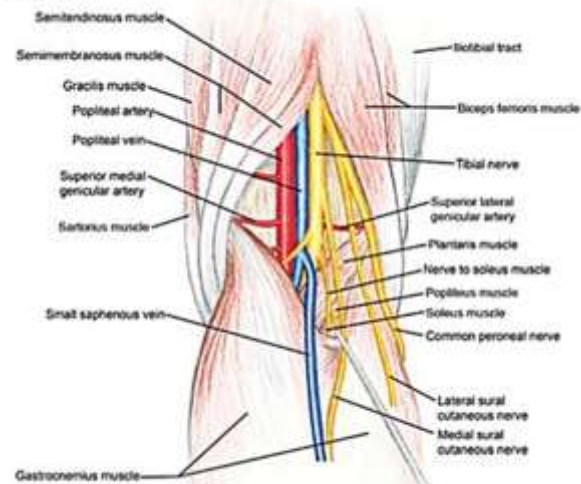
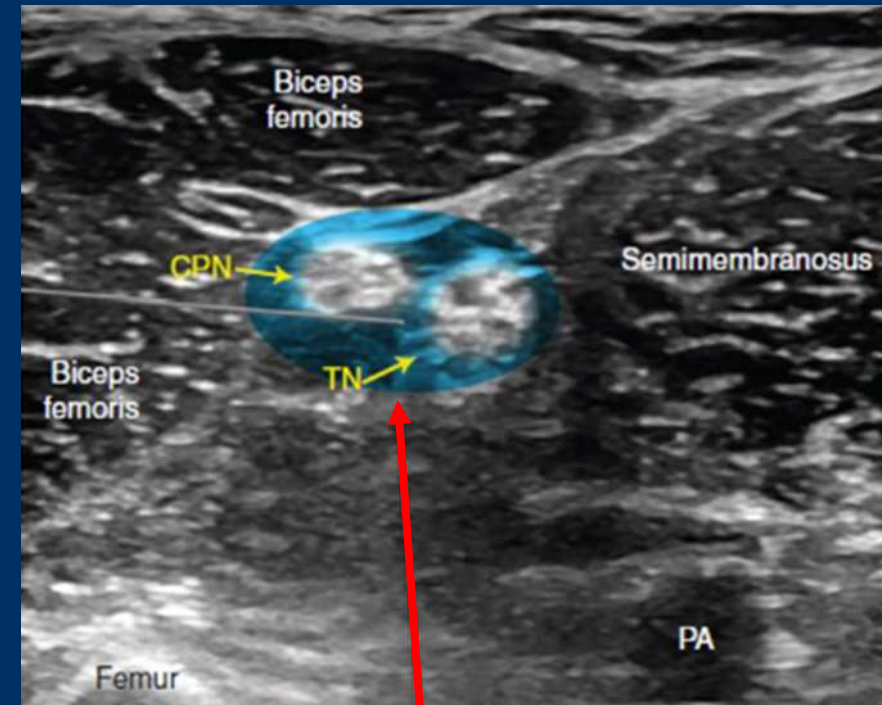
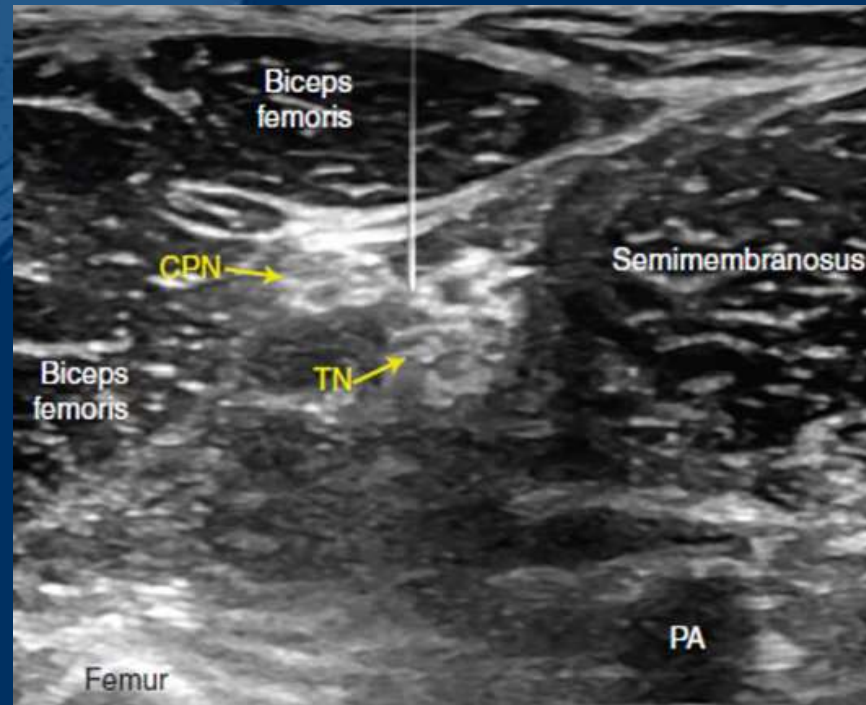


Fig. 3: Sciatic nerve—skin innervation

# Popliteal Nerve Block – Lateral Approach



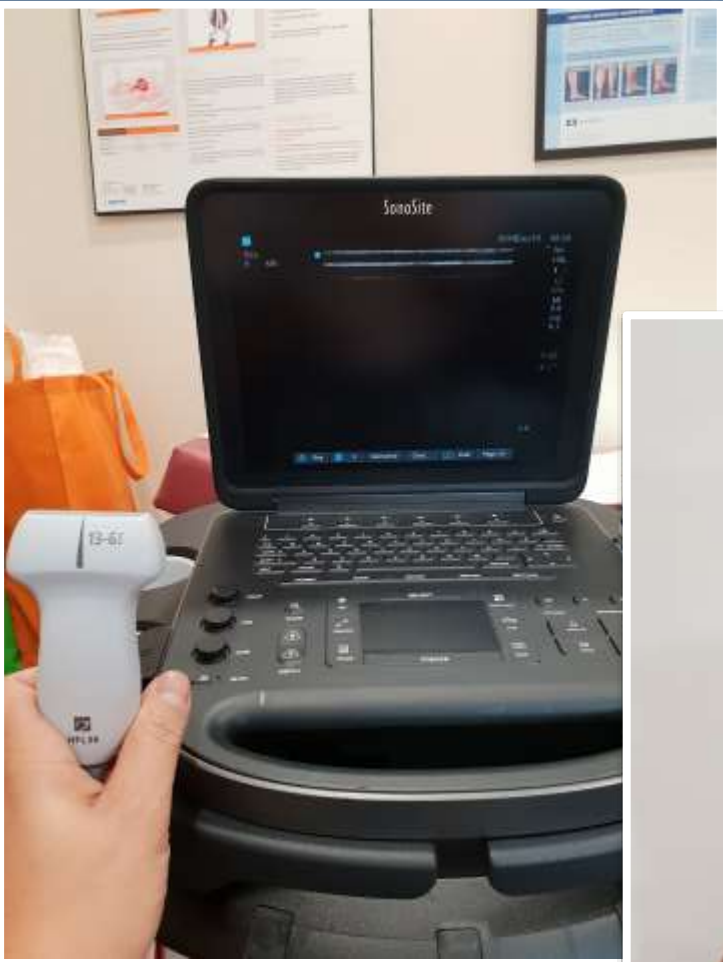
Courtesy NYSORA

Local Anaesthetic is infiltrated to surround the nerve in a "Halo" of anaesthetic



In-plane lateral approach

# Equipment



+



**Time to  
administer Block**

—

**10 min**

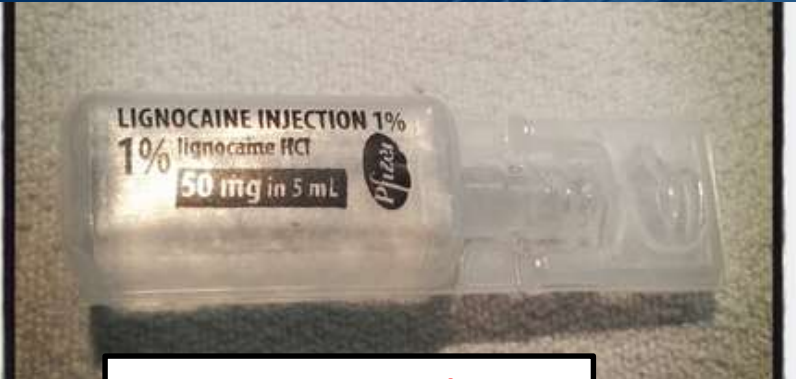
**Onset of  
Action**

—

**10 – 15 min**



# Drugs



**100 mg 1%  
Lidocaine ie 10 mls  
(No Adrenalin)**

**+**



**50 mg 0.5%  
Bupivacaine/Marcaine ie 10 mls  
(No Adrenalin)**

**+**

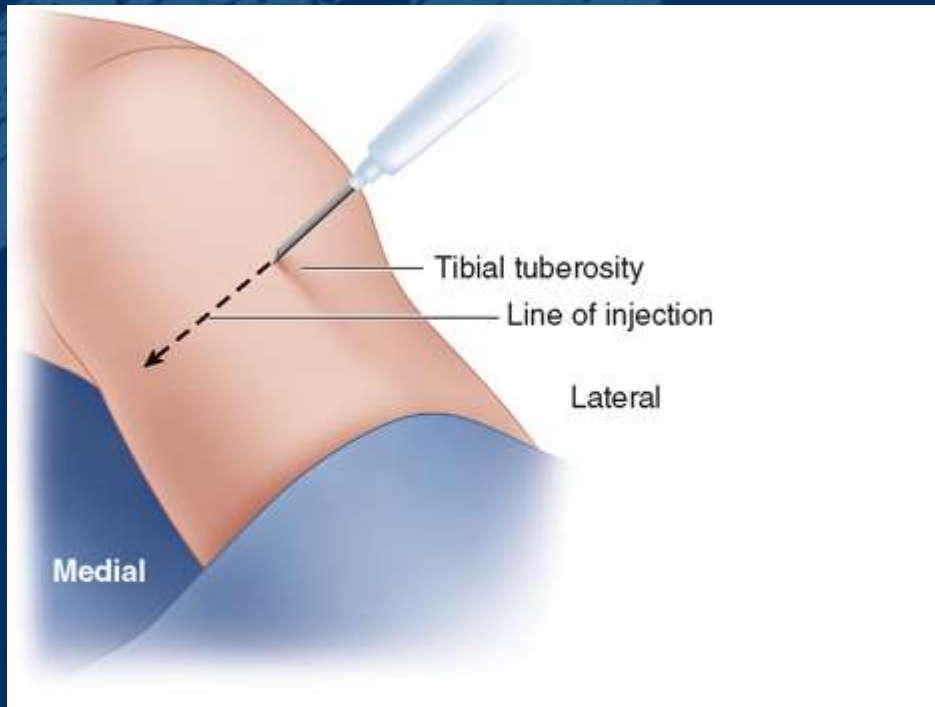


**0.9% Normal Saline ie 10 mls**



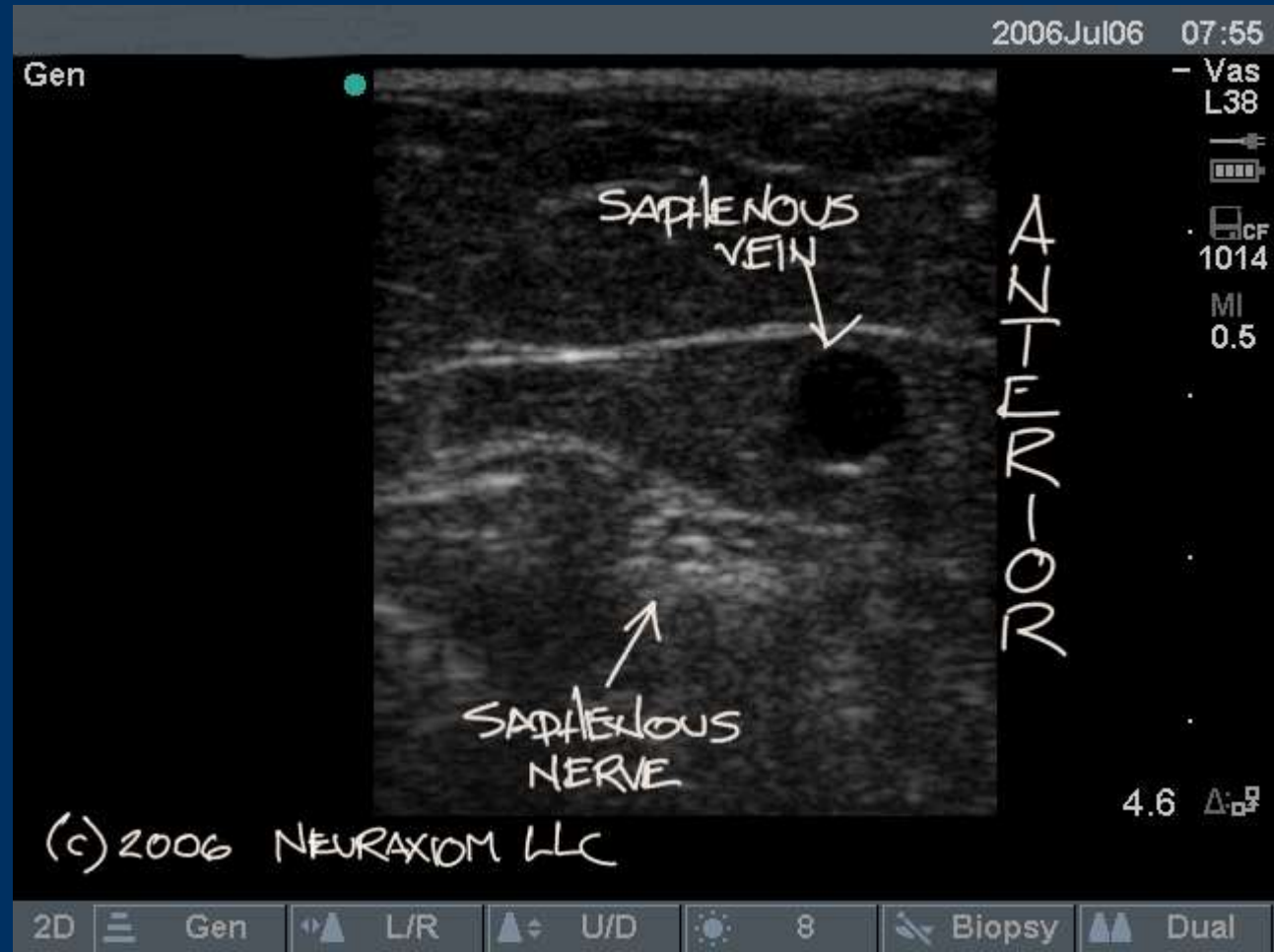


# SAPHENOUS NERVE BLOCK – BELOW KNEE APPROACH



Source: Butterworth JF, Mackey DC, Wasnick JD: *Morgan & Mikhail's Clinical Anesthesiology*, 5th Edition: www.accessmedicine.com

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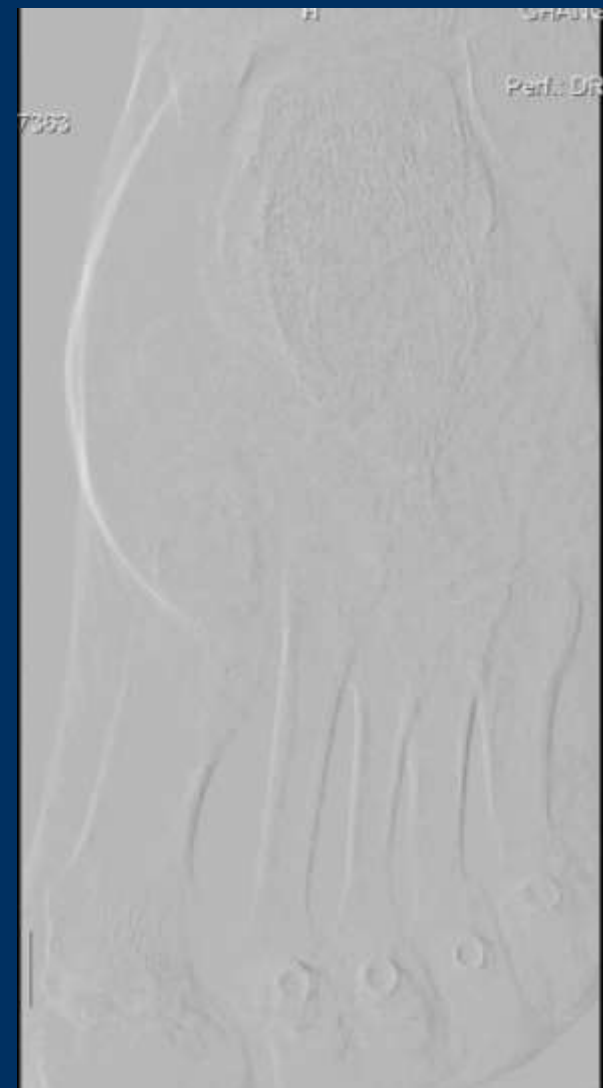
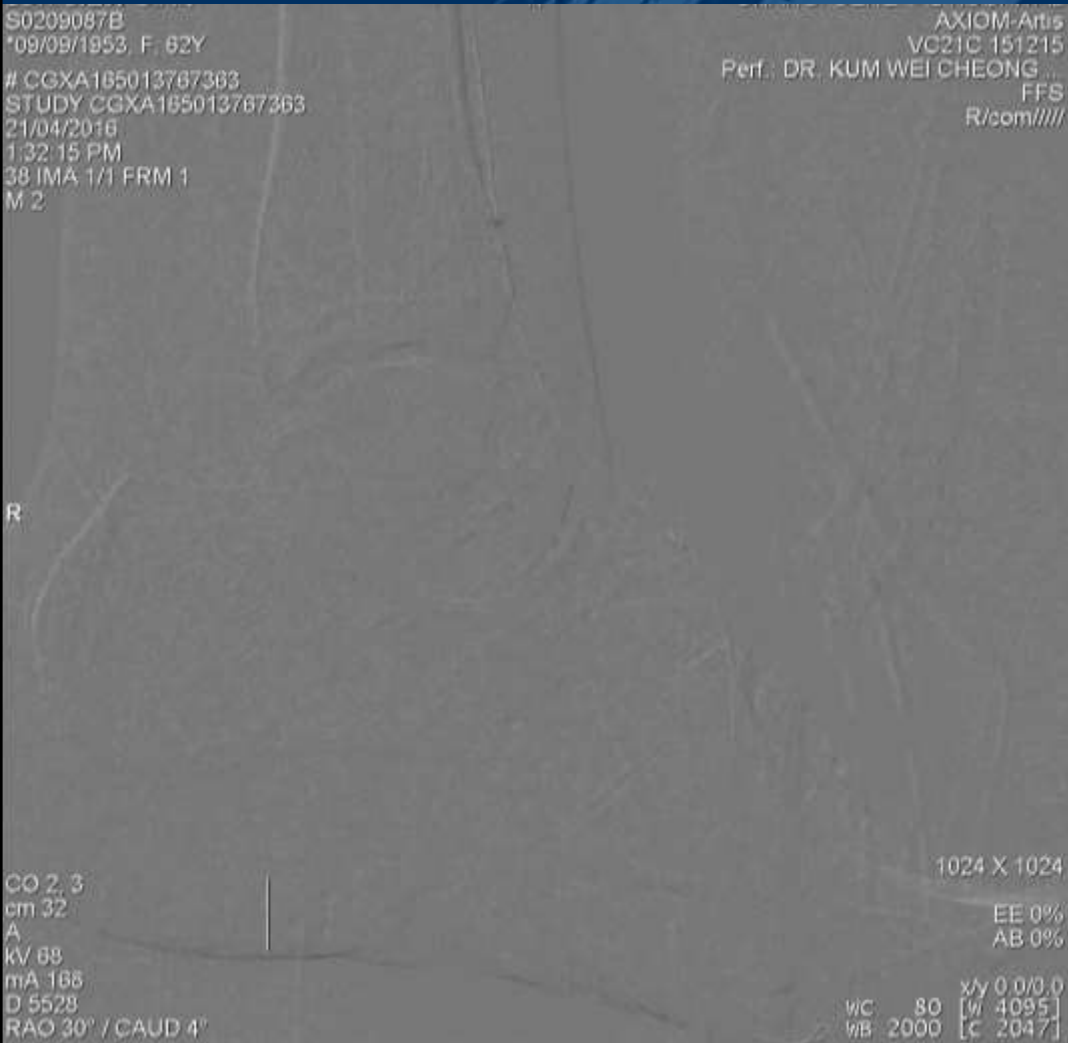
# Precautions of Nerve block

1. Nerve damage (rare)
  - Identify anatomy with US
  - Use appropriate blunt needle
2. LA toxicity
3. Fall risk (loss of motor function)
4. Bleeding (rare) – can be done with Dual Antiplatelet and even anticoagulant
5. Absence of pain may mask bleeding in compartments during intervention

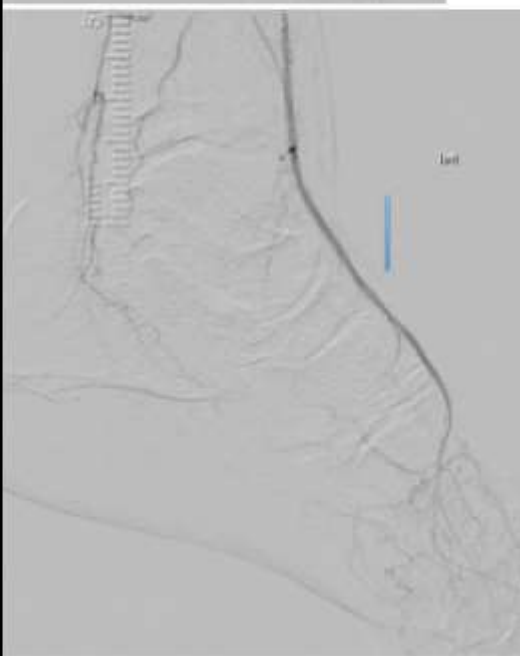
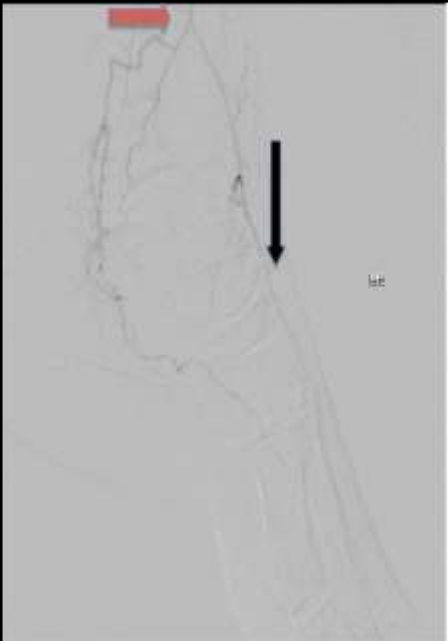


**CASE EG**

# CO2 Angiogram – Optimed Bag system



# Open Retrograde



Contents lists available at ScienceDirect

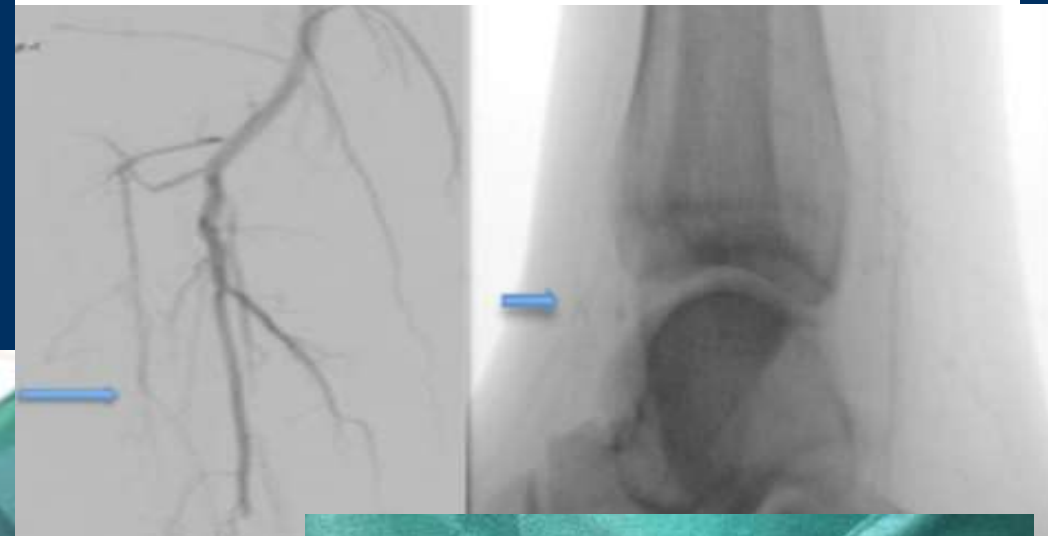
ELSEVIER

International Journal of Surgery Case Reports

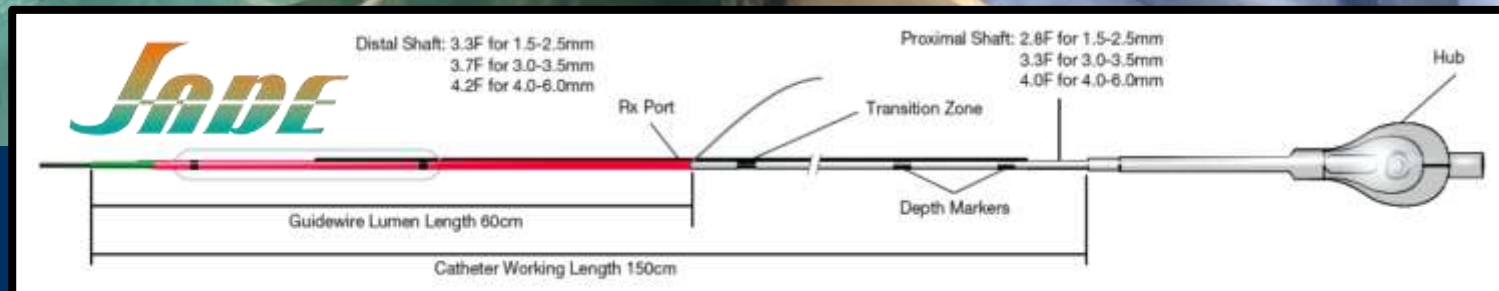
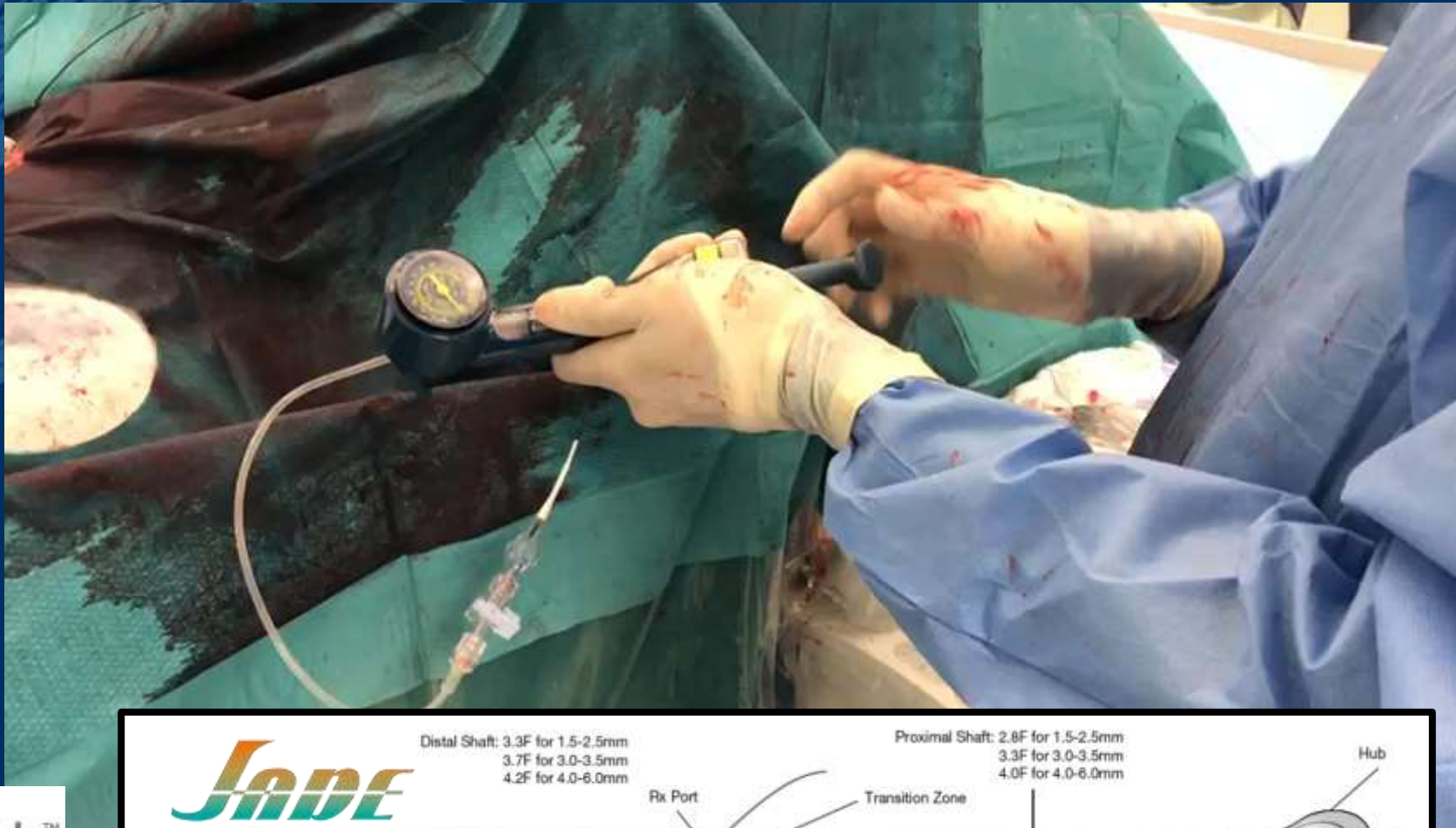
journal homepage: [www.casereports.com](http://www.casereports.com)

The open retrograde approach as an alternative for failed percutaneous access for difficult below the knee chronic total occlusions—A case series

CrossMark



# High Pressure NC Angioplasty





# Caution – No Pain with Perforations *ie “Silent Perforations”*



# Fasciotomy



**Double Perf !**



**Immediate closure of Fasciotomy wound over a drain**



# Summary

- Routine interventionalist administered nerve block for CLI:
  - Facilitates HP POBA with no pain
  - Allows retrograde approaches
  - Allows simultaneous wound management
- Routine in my practice and is invaluable tool, avoiding problem with sedation/GA in a high risk patient

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