

L'esame dei Nervi Periferici

Il quadro clinico-elettrofisiologico della Malattia di Hansen

Ospedale del Mare - Napoli



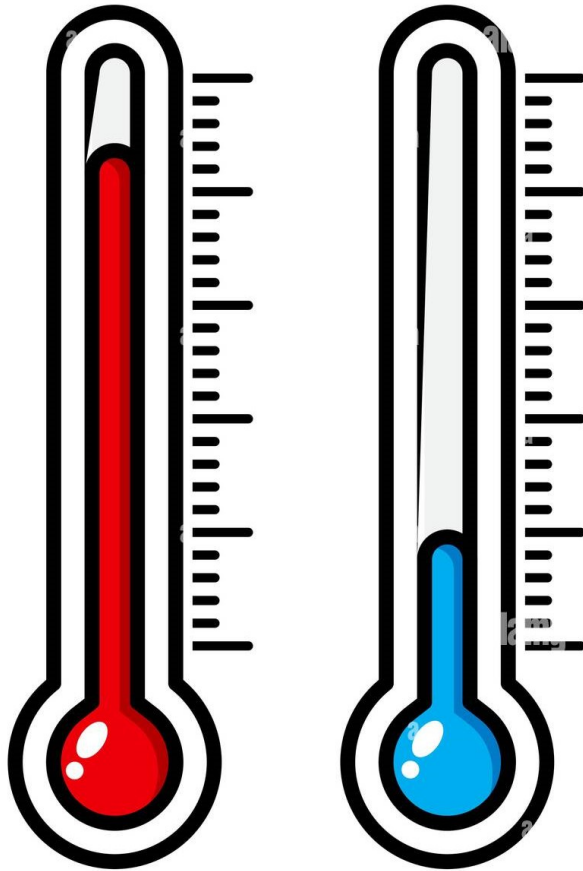
Ospedale del Mare



**Corso di formazione
teorico-pratico
per la diagnosi
corretta della
malattia
di Hansen**

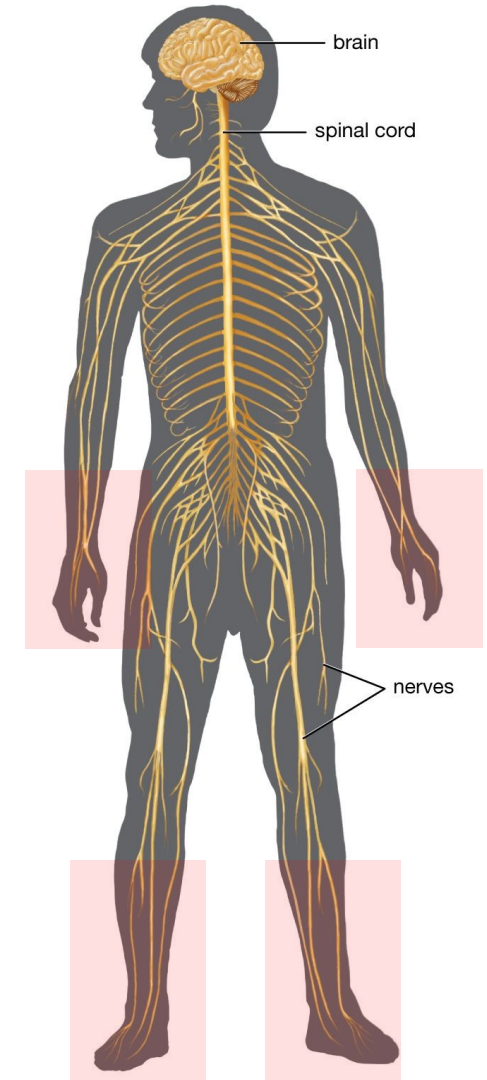
**25-26
OTTOBRE
2024**

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P.O. dei Pellegrini
Asl Napoli 1 Centro

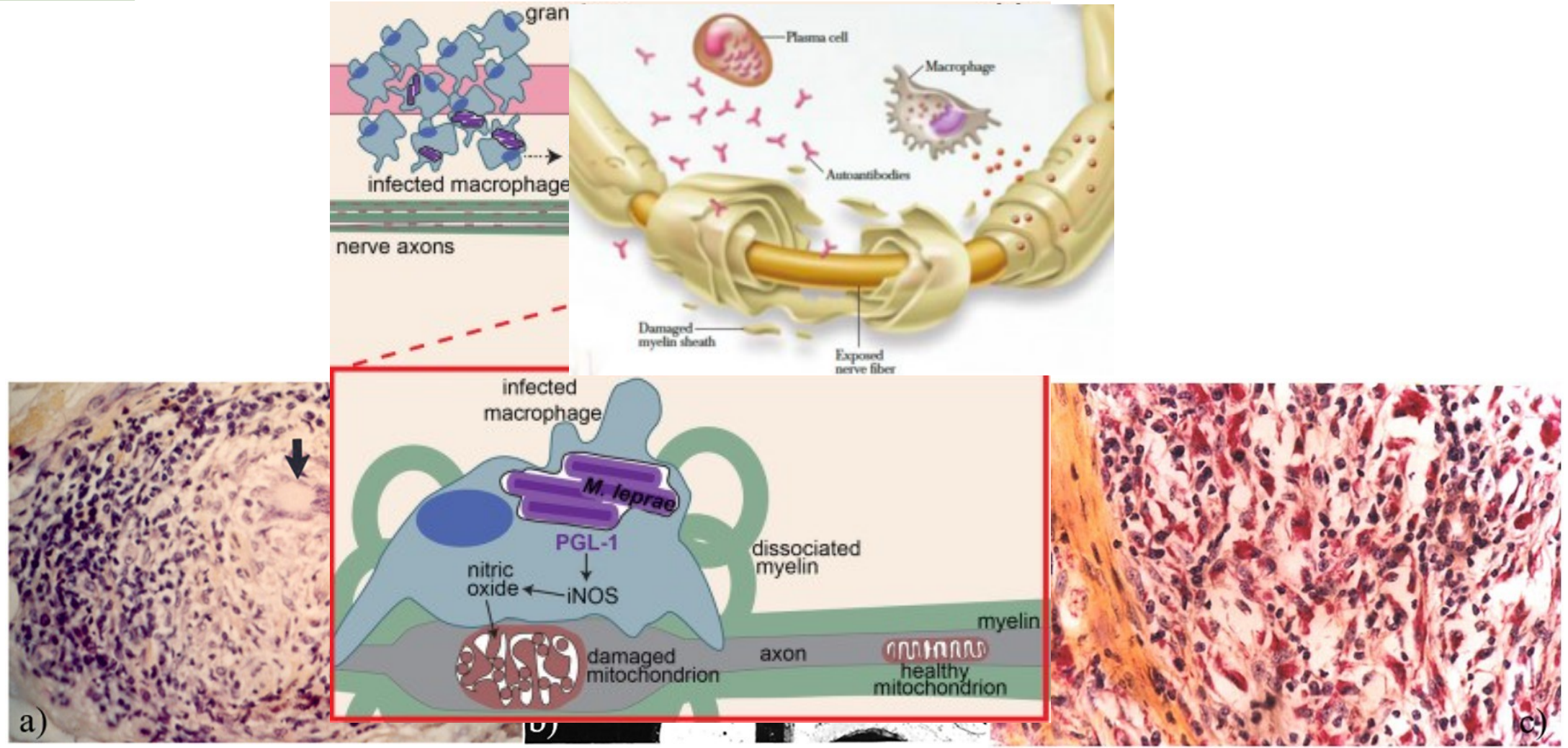


37

27-30°



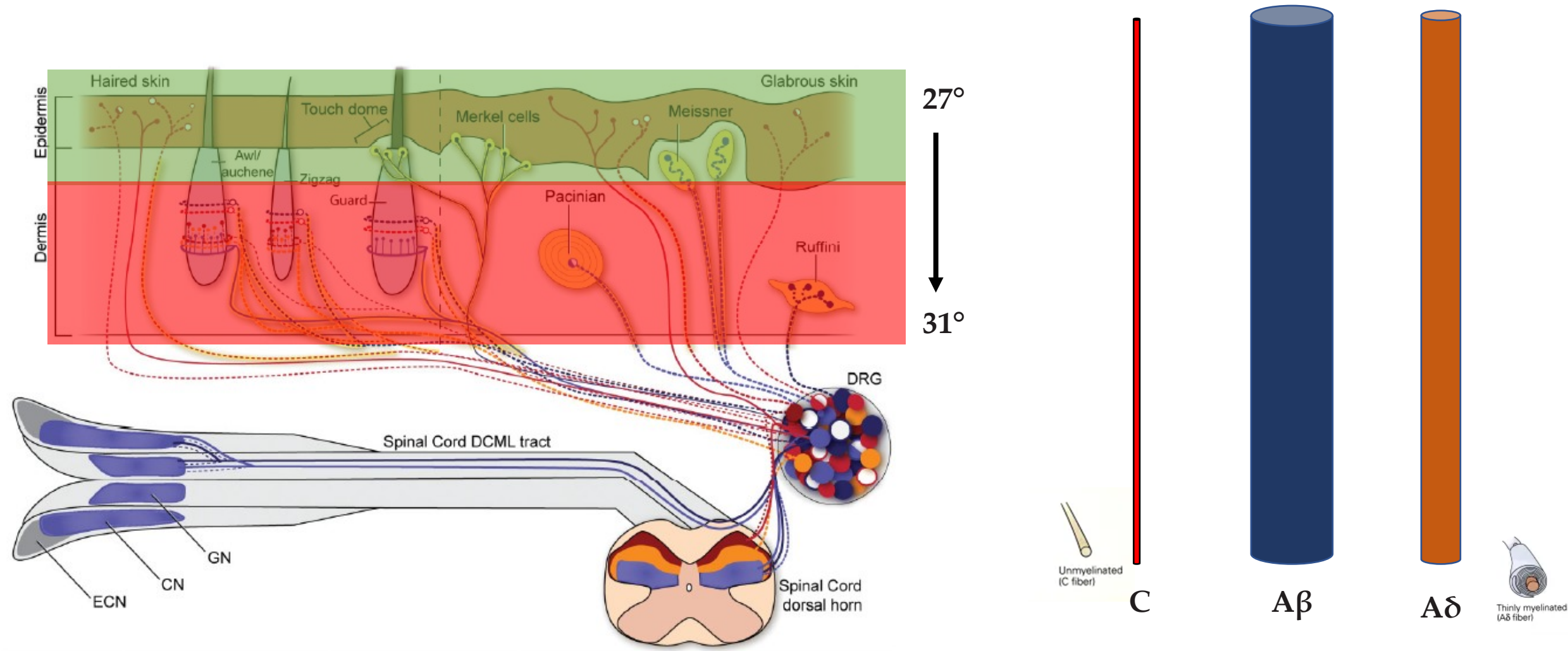
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S.V. Khadilkar et al. 2021



La Neuropatia: la via del freddo



Sintomi Negativi

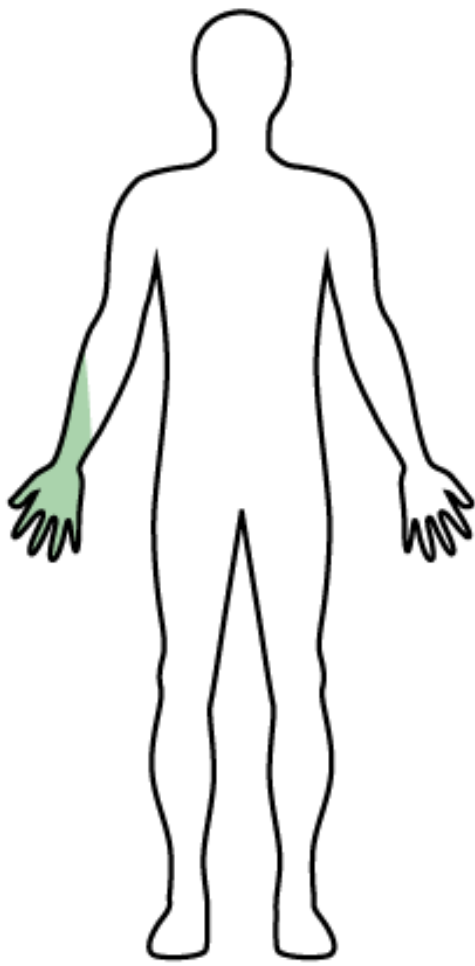
- Intorpidimento
- Ipoestesia
- Anestesia
- Anidrosi
- Deficit motori



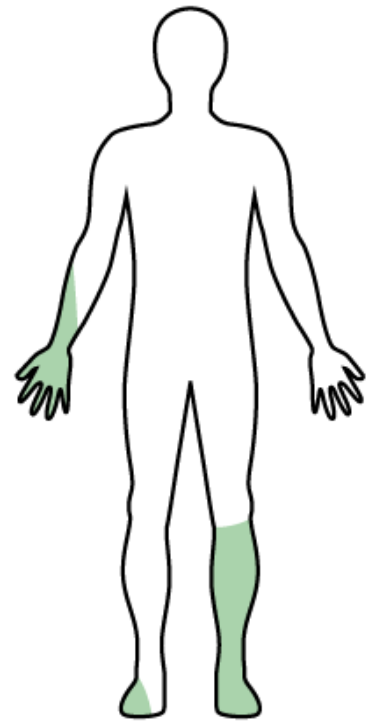
Sintomi Positivi

- Parestesie
- Dolore neuropatico
- iperidrosi

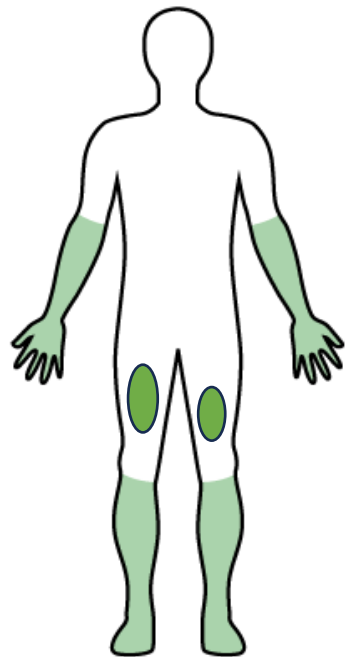




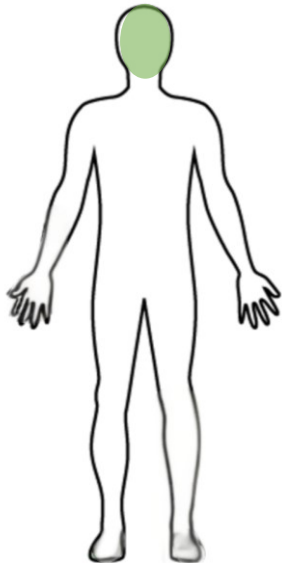
MONO-neuropathy



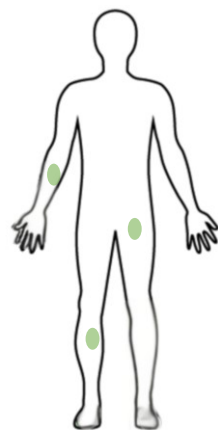
MULTI-neuropathy



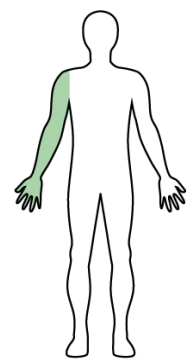
POLY-neuropathy



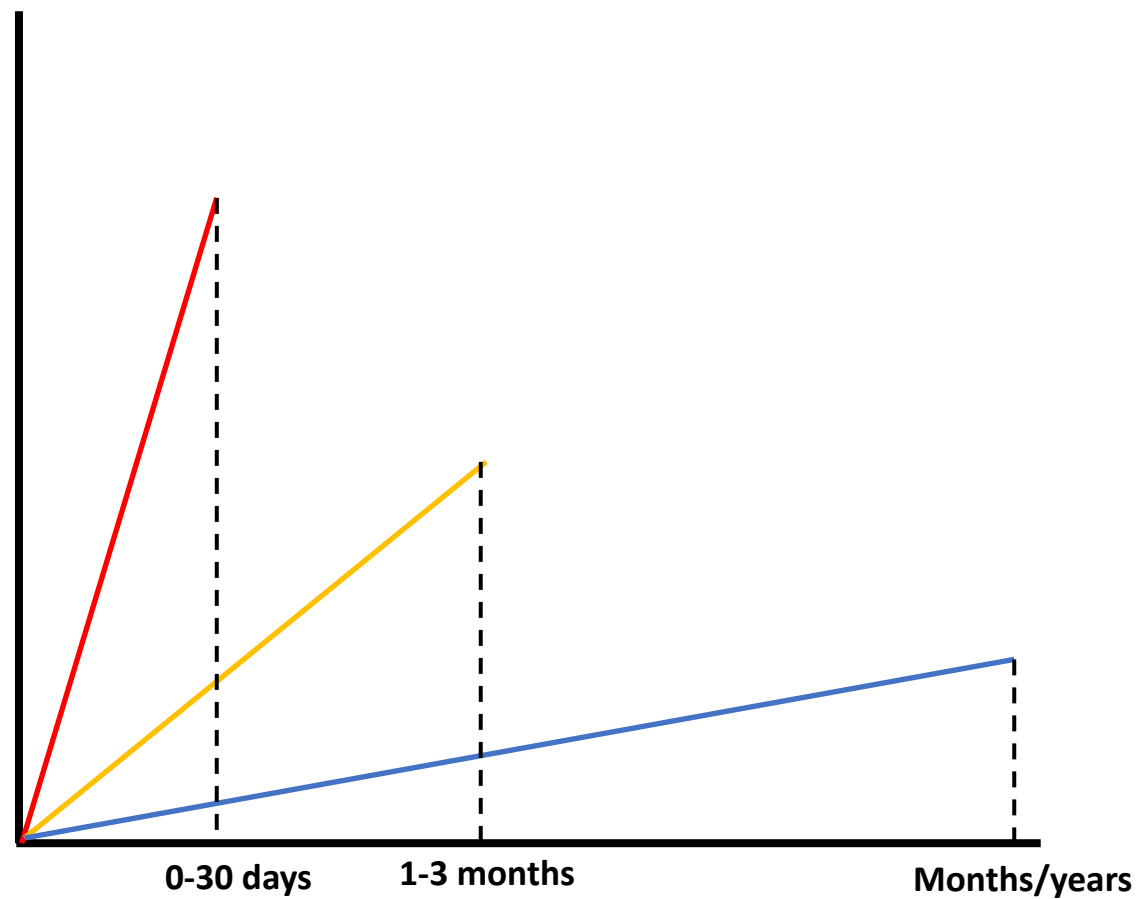
CRANIAL-neuropathy



Ganglionopathy







**radiculopathy/
plexopathy**

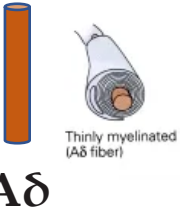
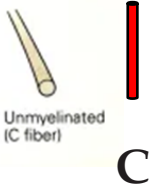
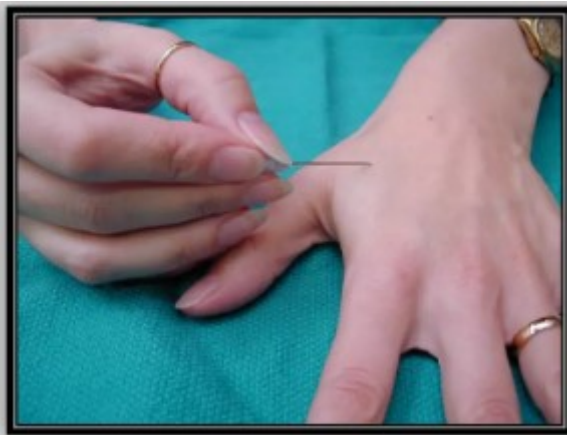


Acute

Subacute

Chronic

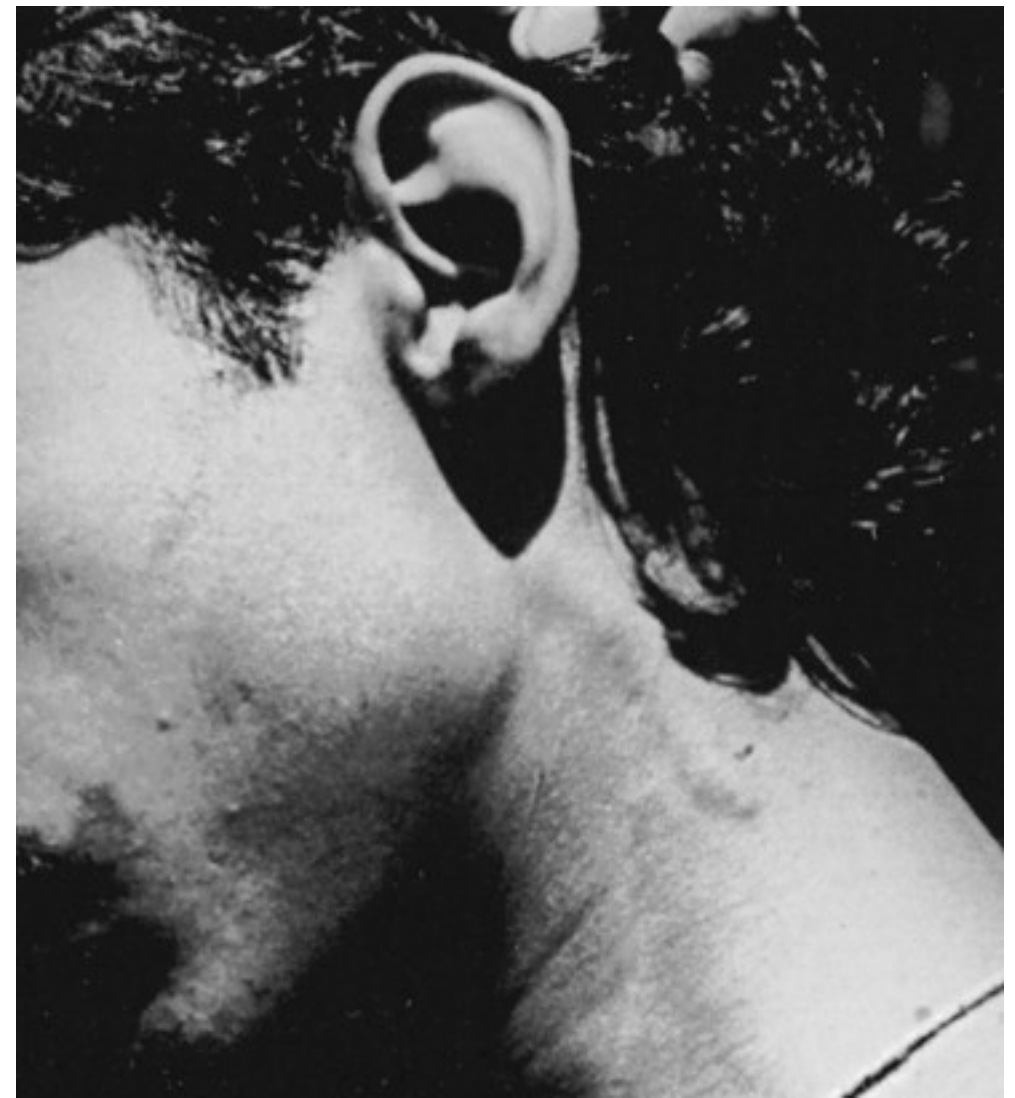
Muscle test 6: Ankle dorsiflexion	
Commands: - Pull up your toes	
	
Grade 1	Grade 2
	
Grade 3	Grade 4/5



La neuropatia è palpabile: alcuni nervi più degli altri



Gorbach SL, Bartlett JG, Blacklow NR. *Infectious Diseases*, 3rd Ed. Philadelphia, Lippincott Williams & Wilkins, 2004.

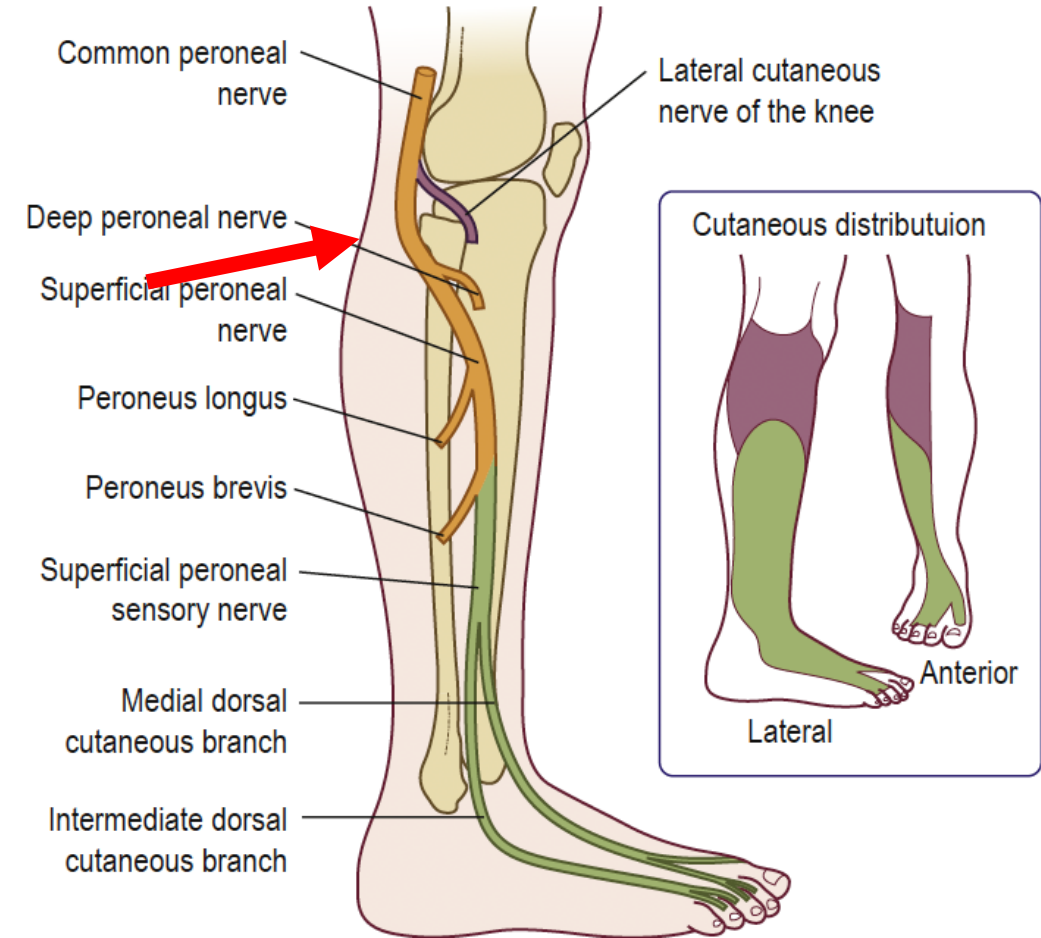


Enlargement of the great auricular nerve in leprosy



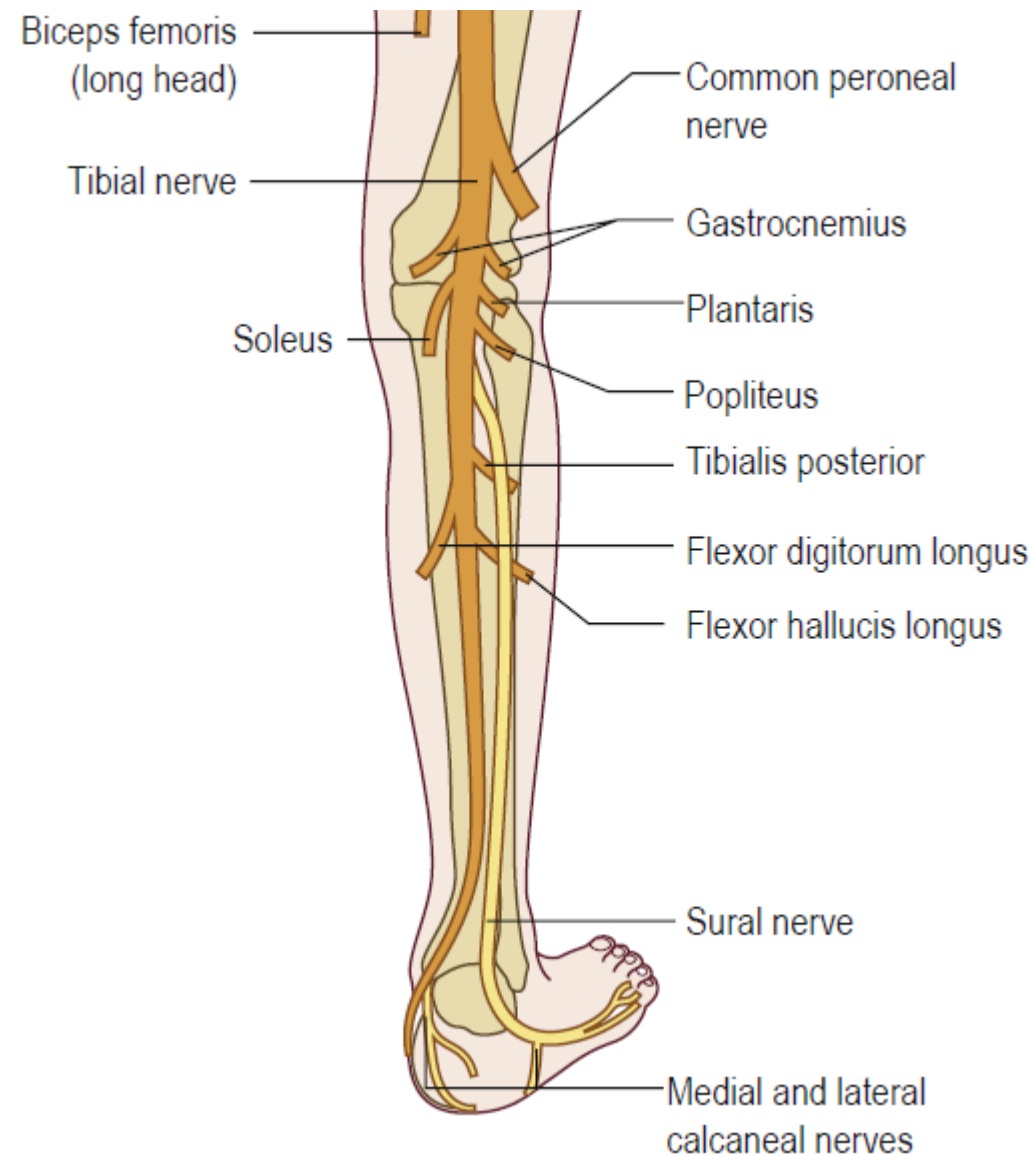
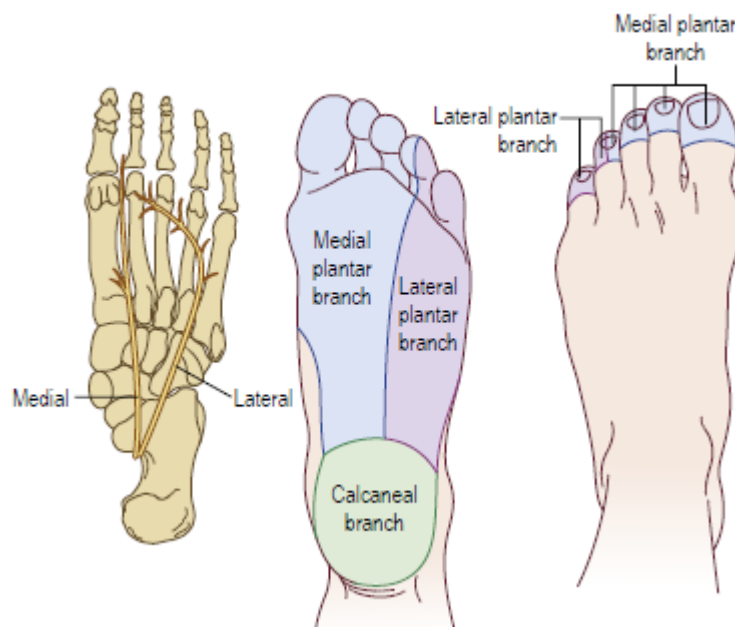
La neuropatia è palpabile: alcuni nervi più degli altri

Nervo sciatico popliteo esterno (SPE) 90%



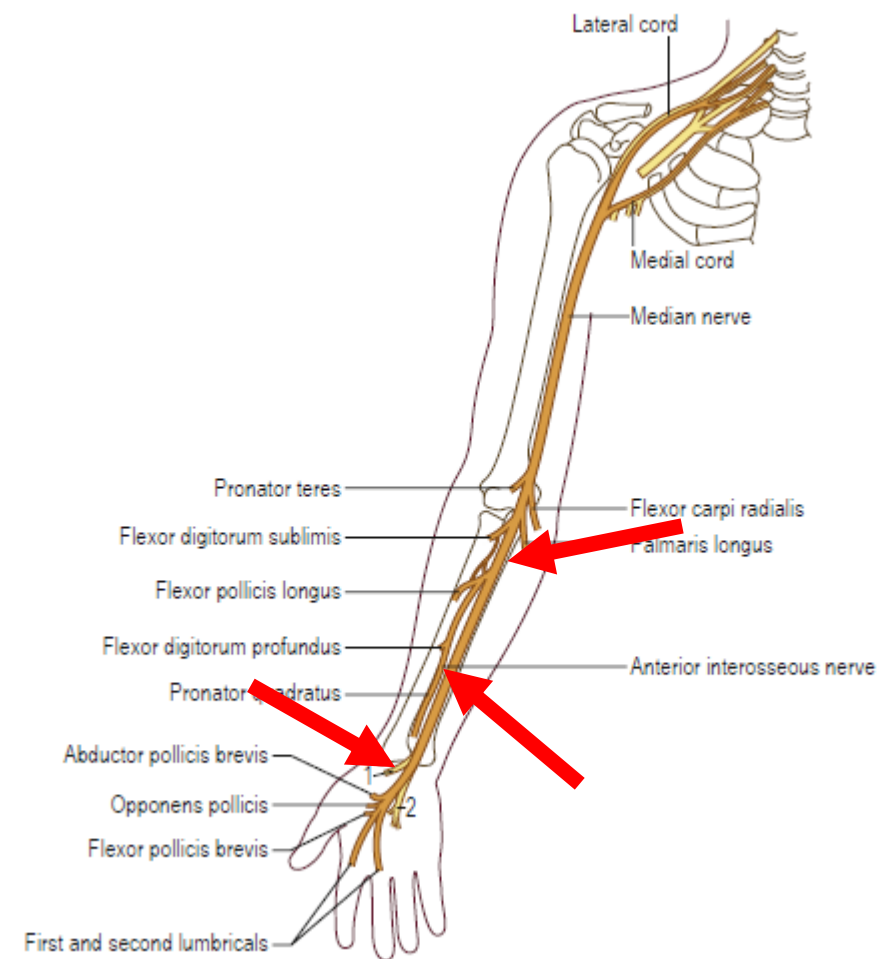
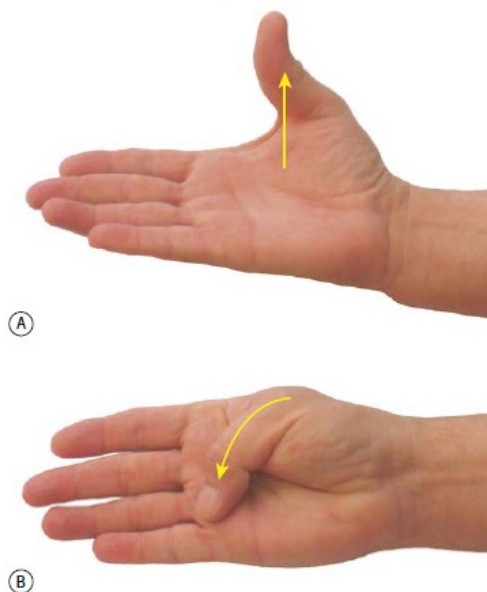
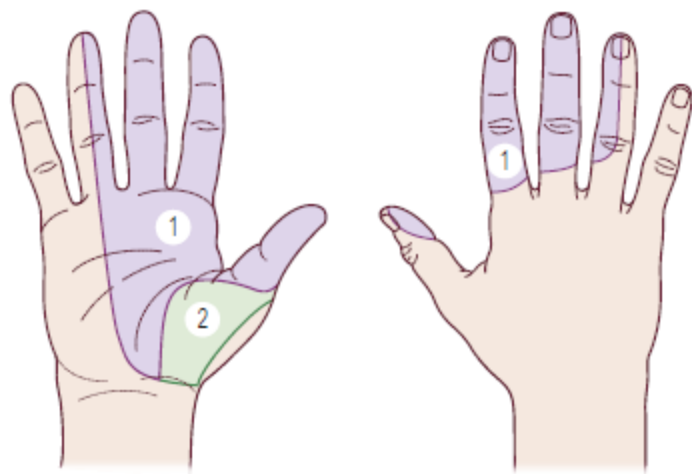
La neuropatia è palpabile: alcuni nervi più degli altri

Nervo tibiale posteriore 55%



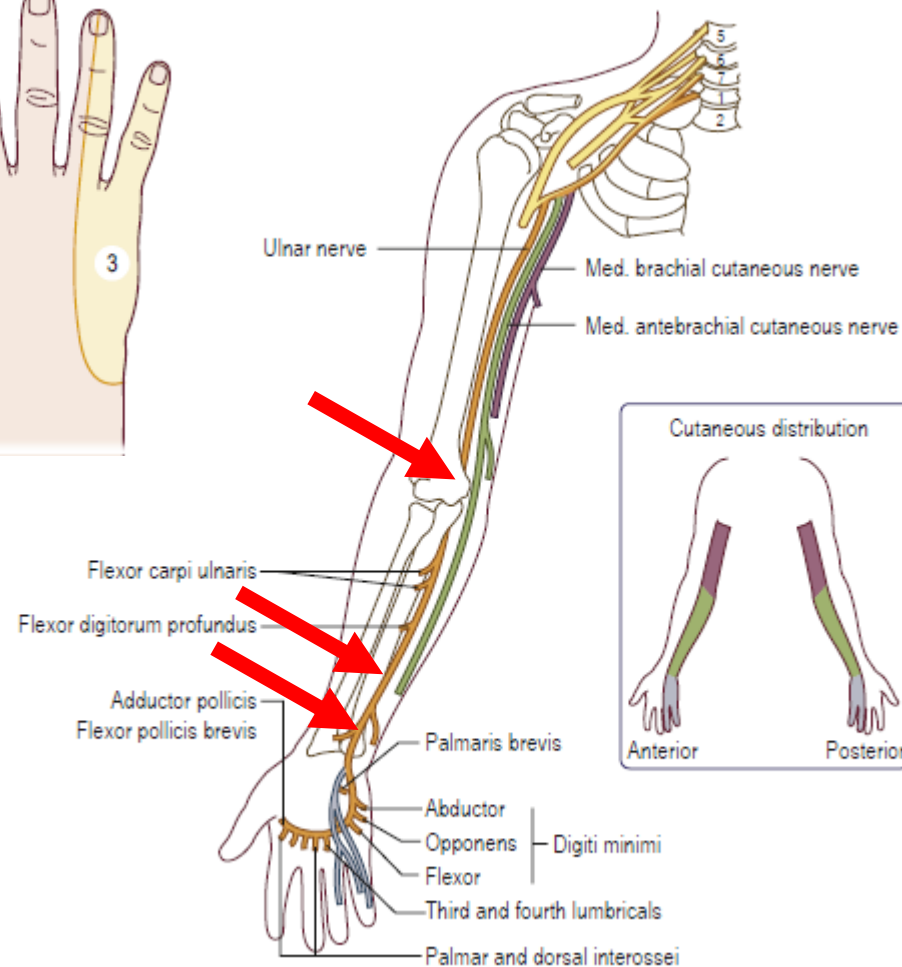
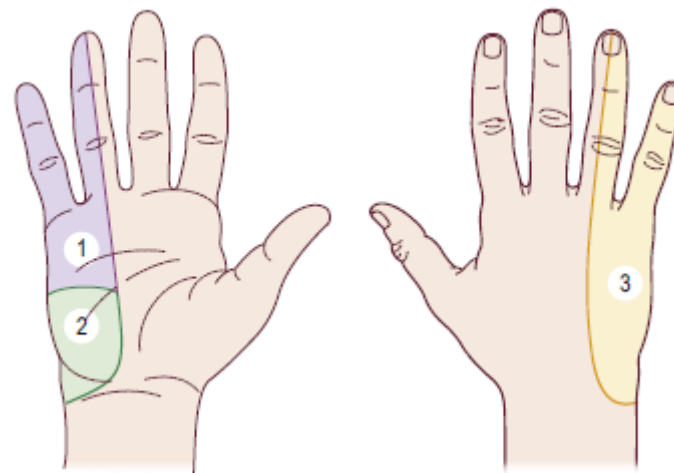
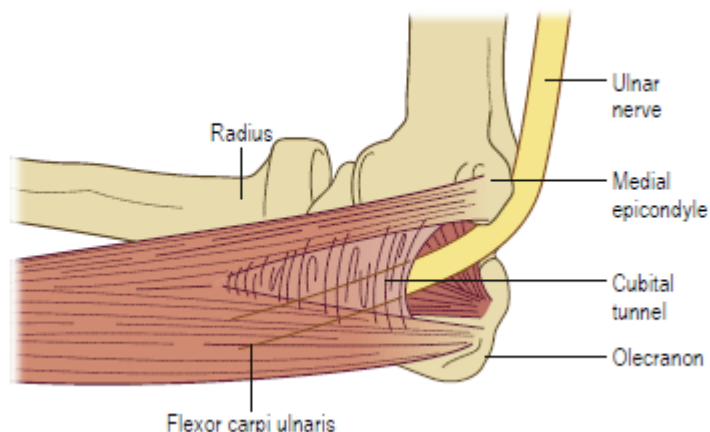
La neuropatia è palpabile: alcuni nervi più degli altri

Nervo mediano 40%



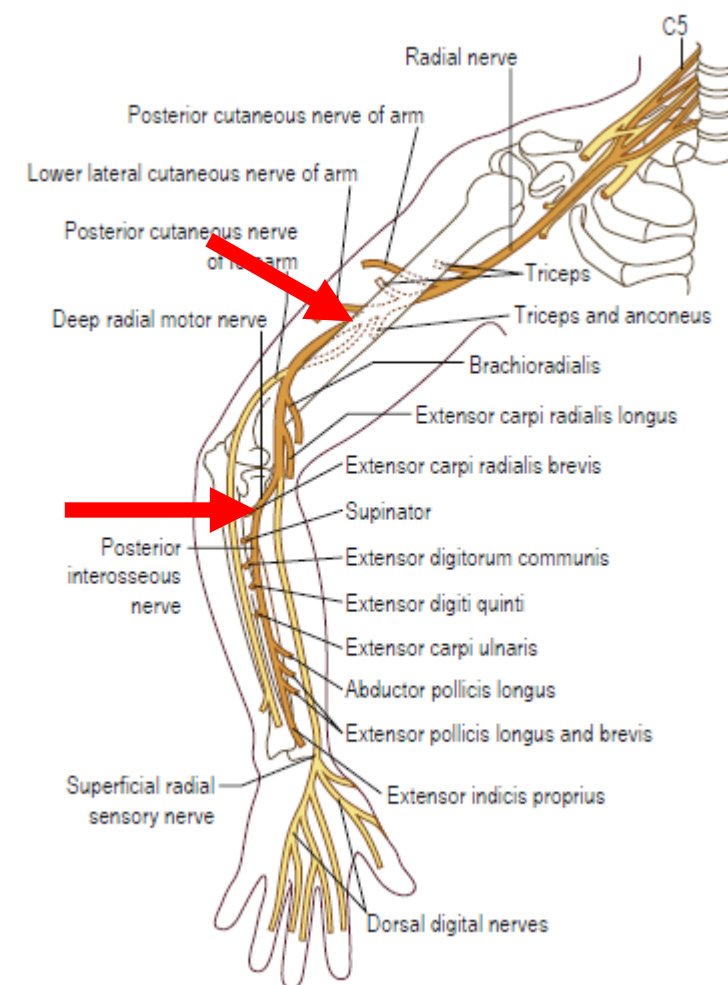
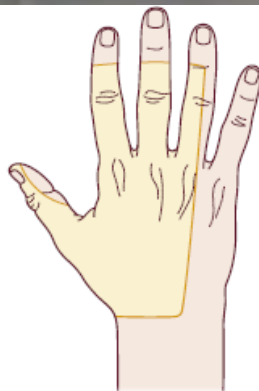
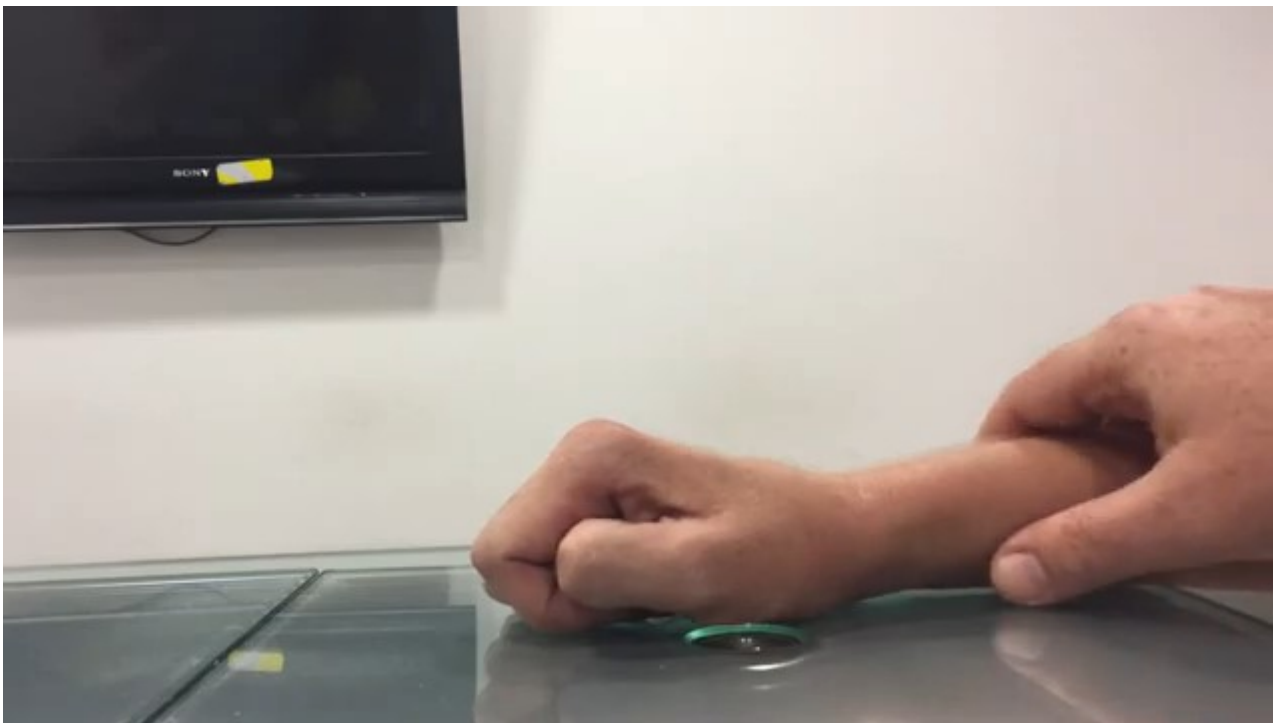
La neuropatia è palpabile: alcuni nervi più degli altri

Nervo Ulnare 35%



La neuropatia è palpabile: alcuni nervi più degli altri

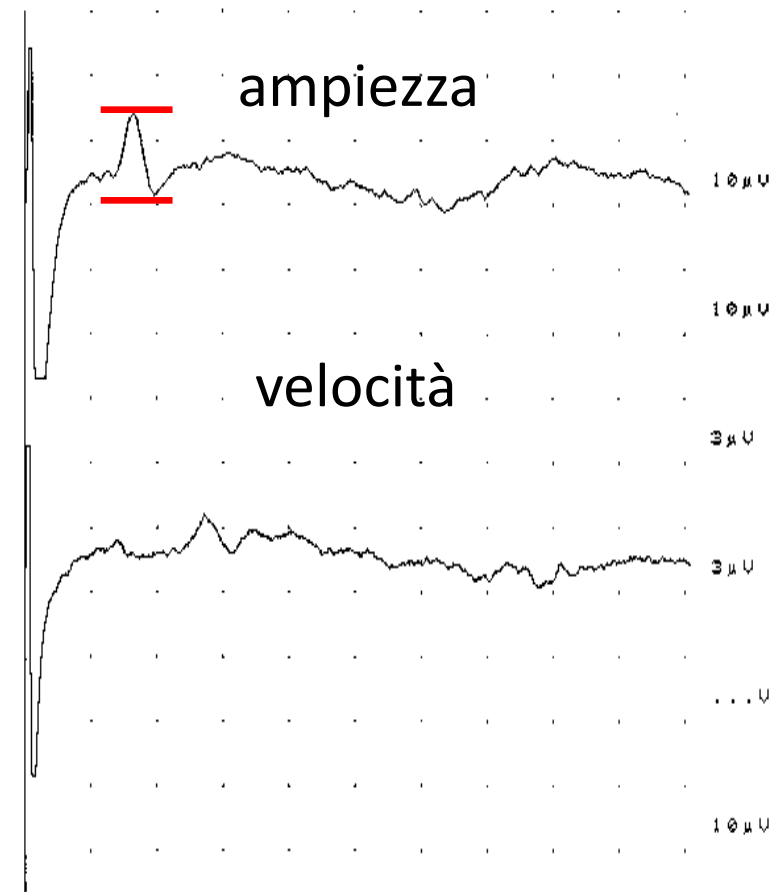
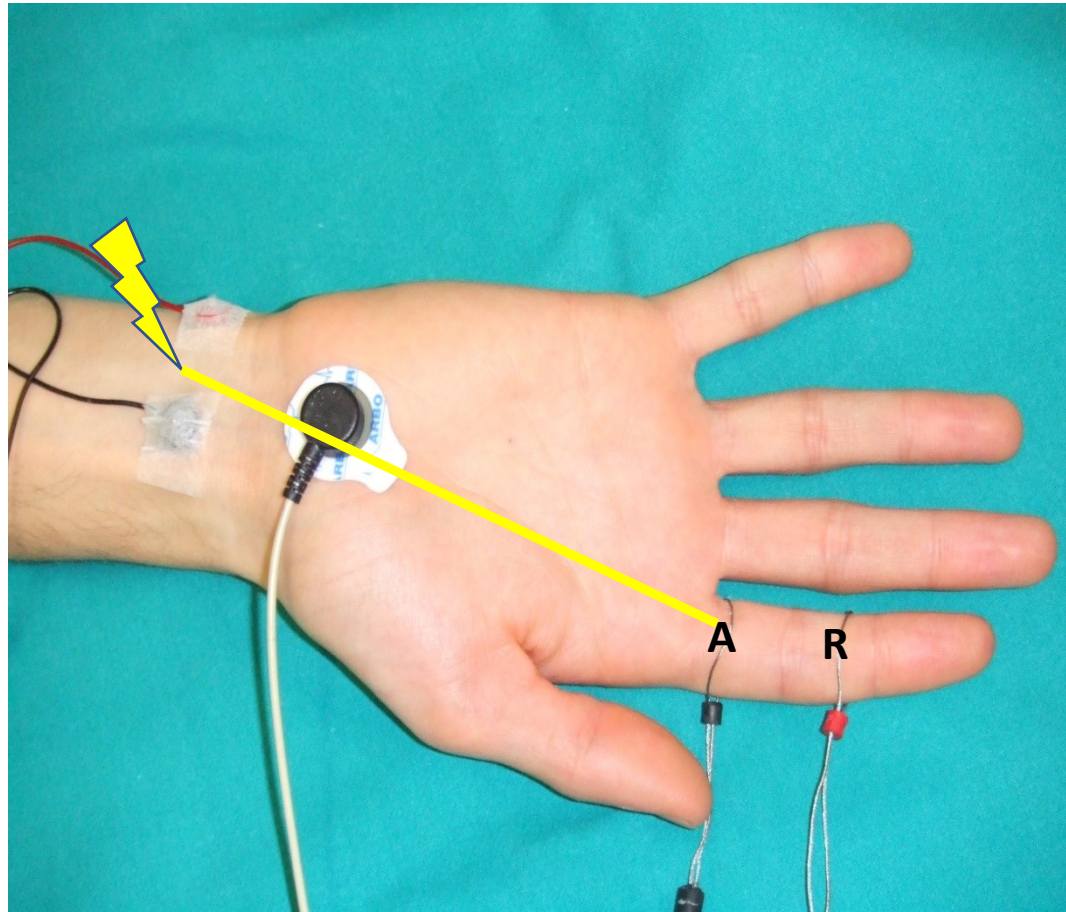
Nervo Radiale 20%

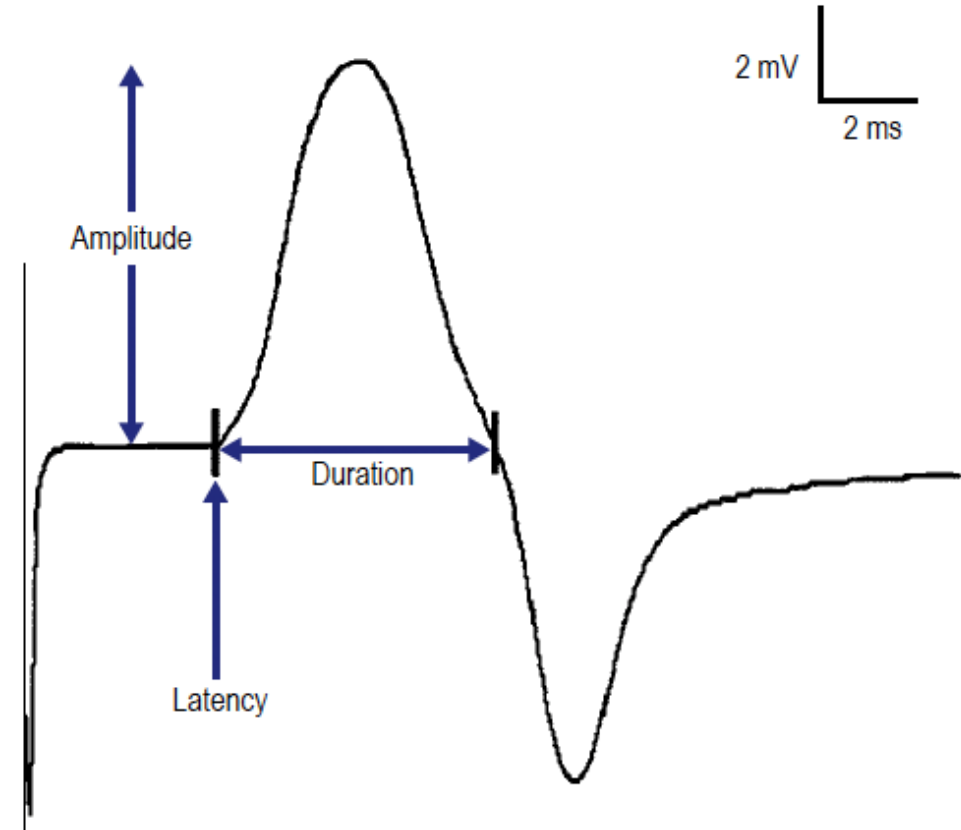
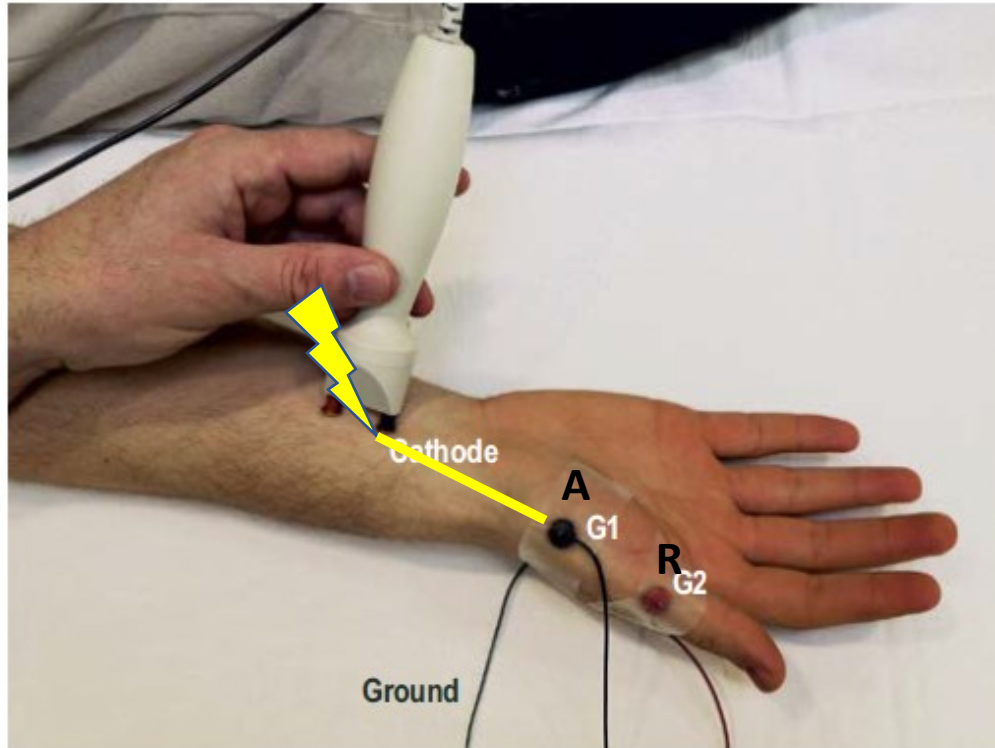


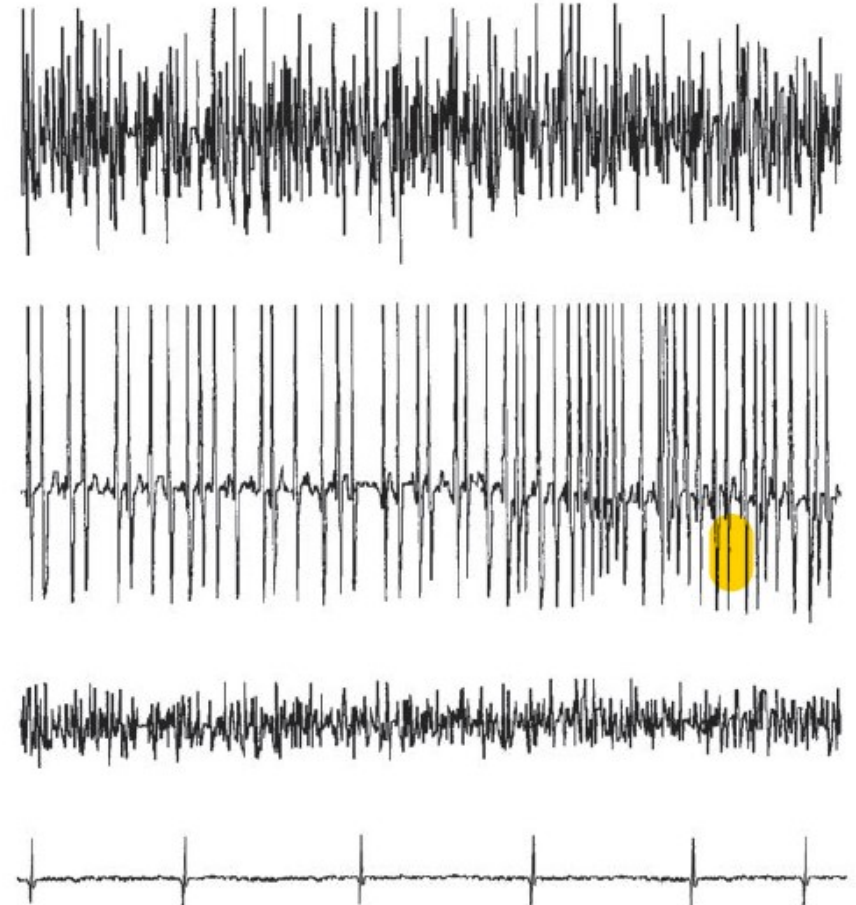
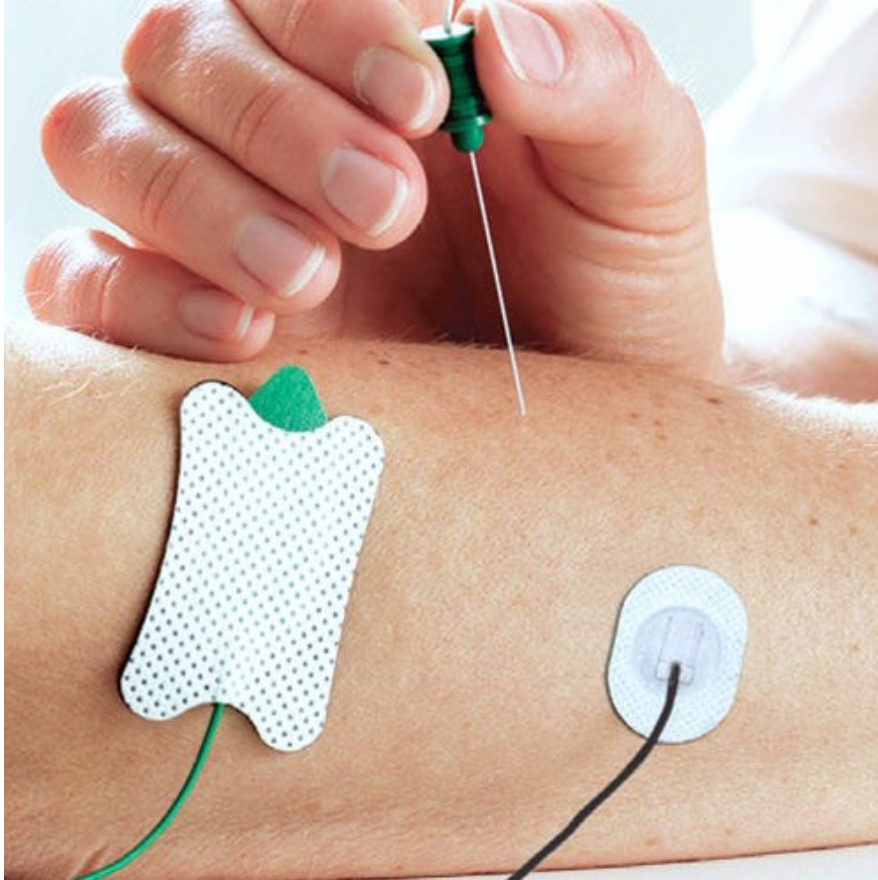
Quale ruolo?

- Diagnosi
- Diagnosi differenziale
- Prognosi
- Follow-up
- Monitoraggio risposta terapeutica
- Effetti collaterali terapia

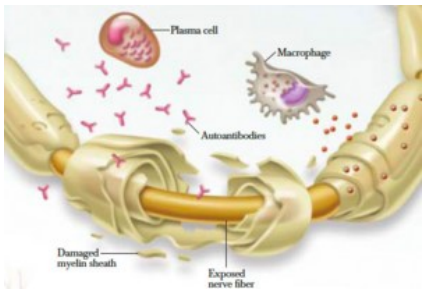






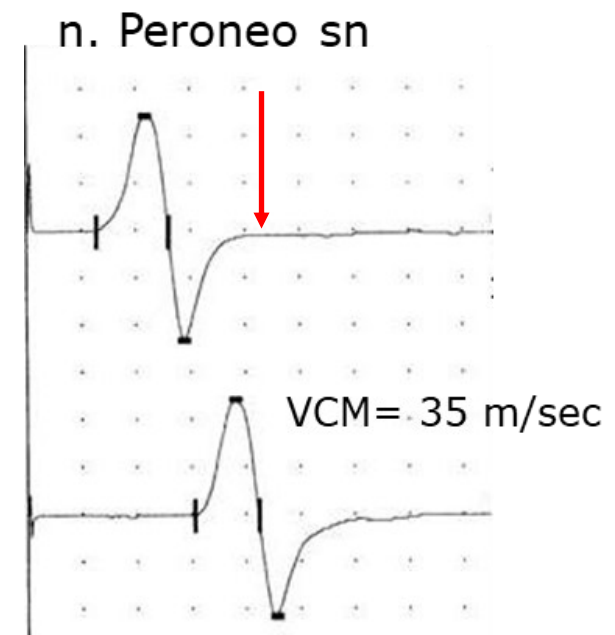
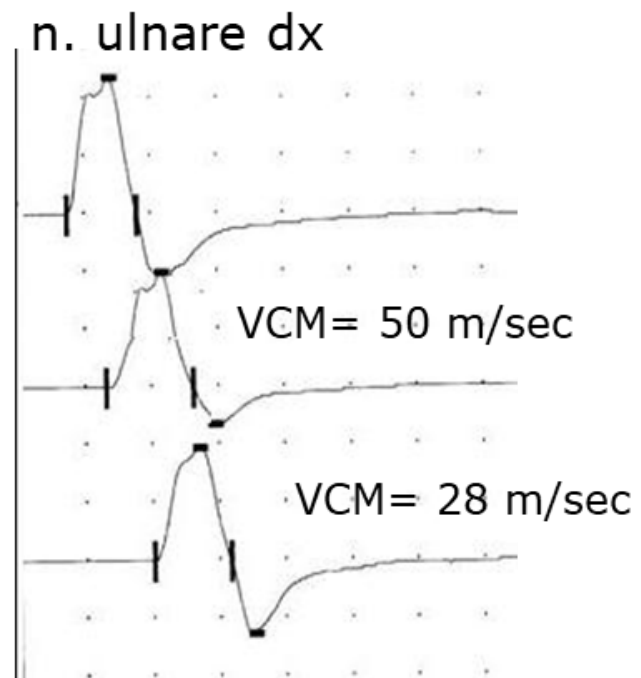
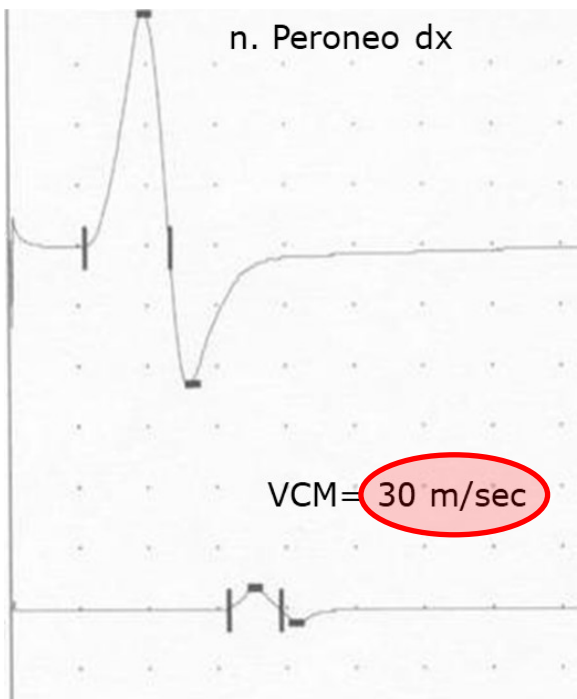
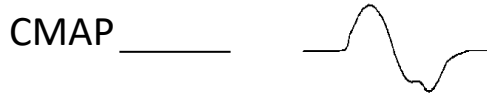
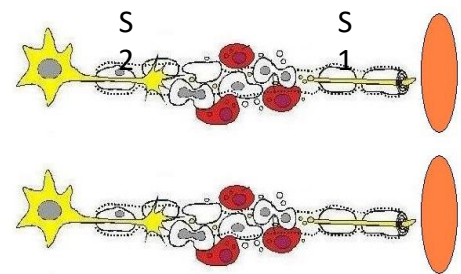


Demielinizzante



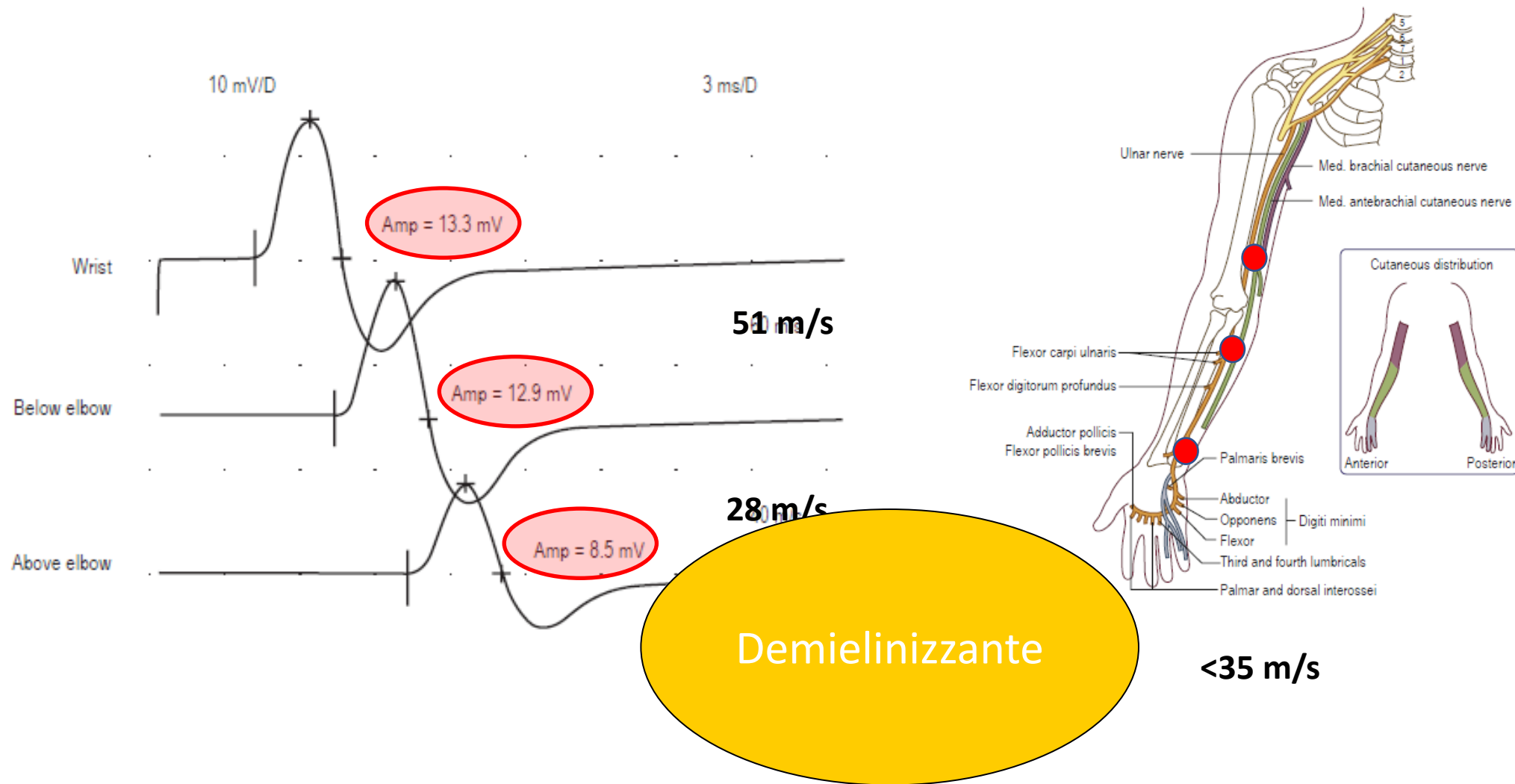
Assonale

Degenerazione assonale



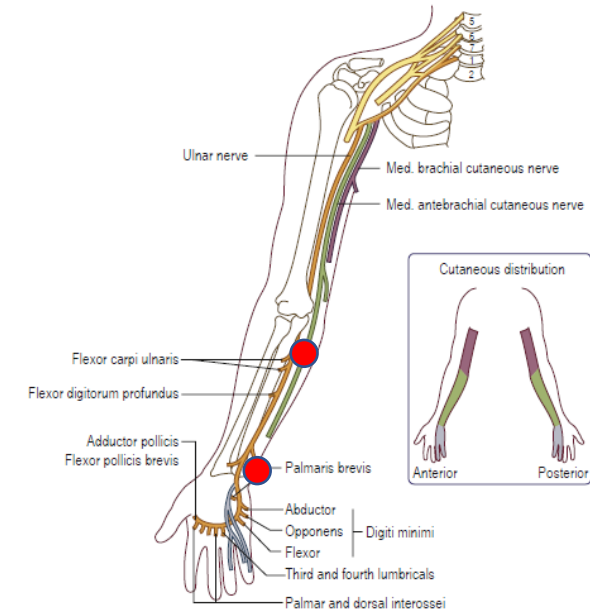
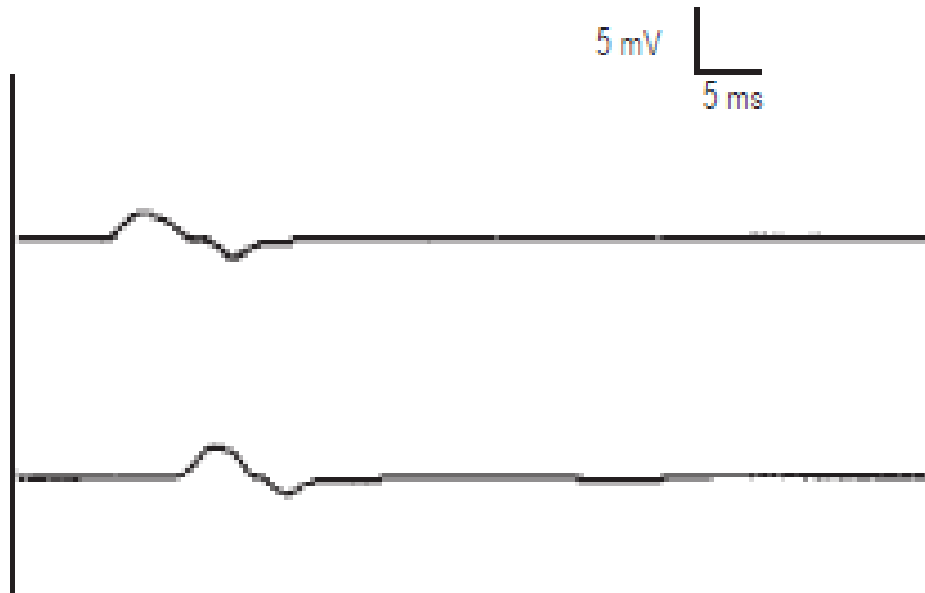
L'esame elettrofisiologico

Rallentamento della velocità di conduzione nervosa



L'esame elettrofisiologico

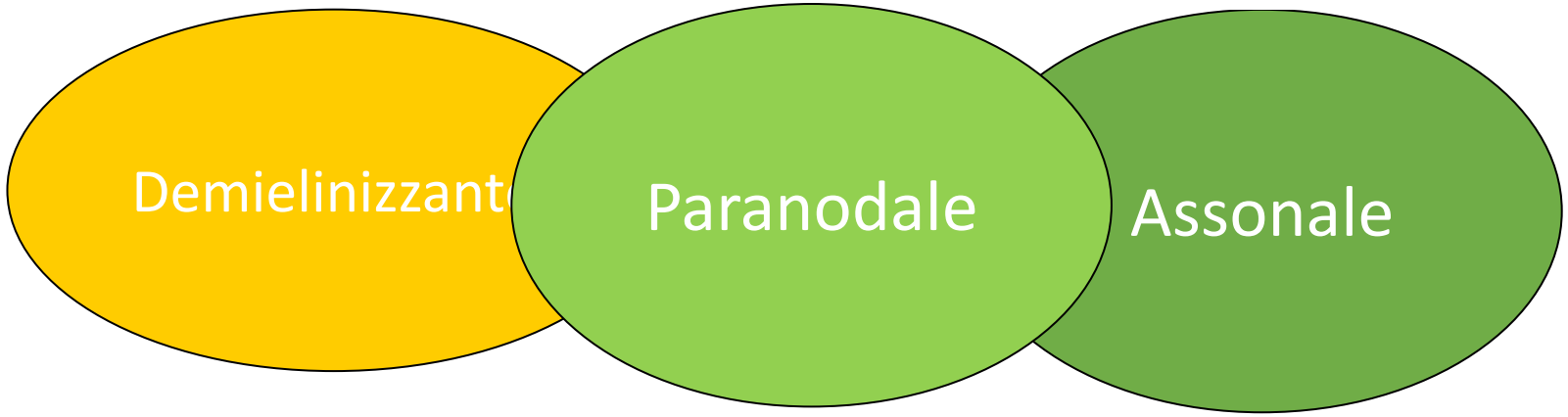
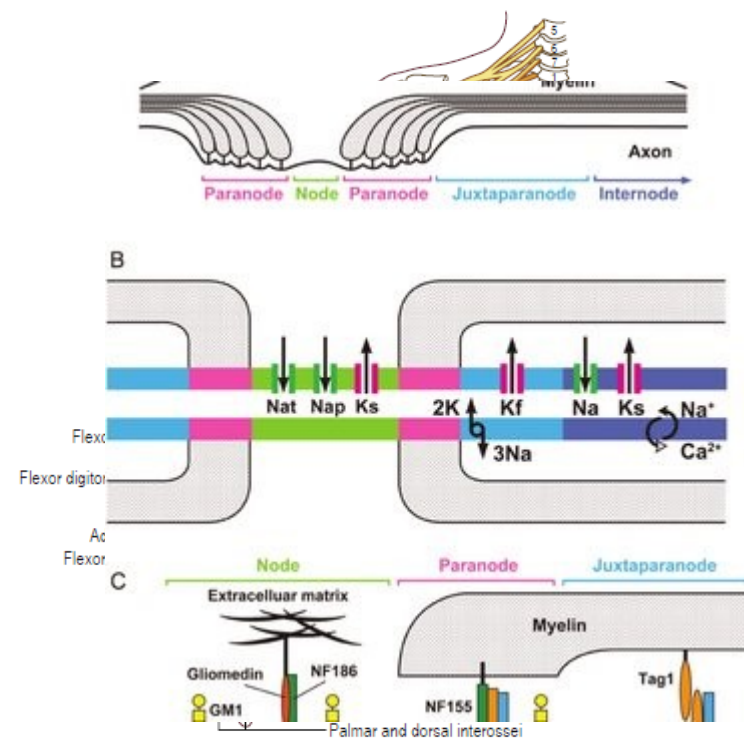
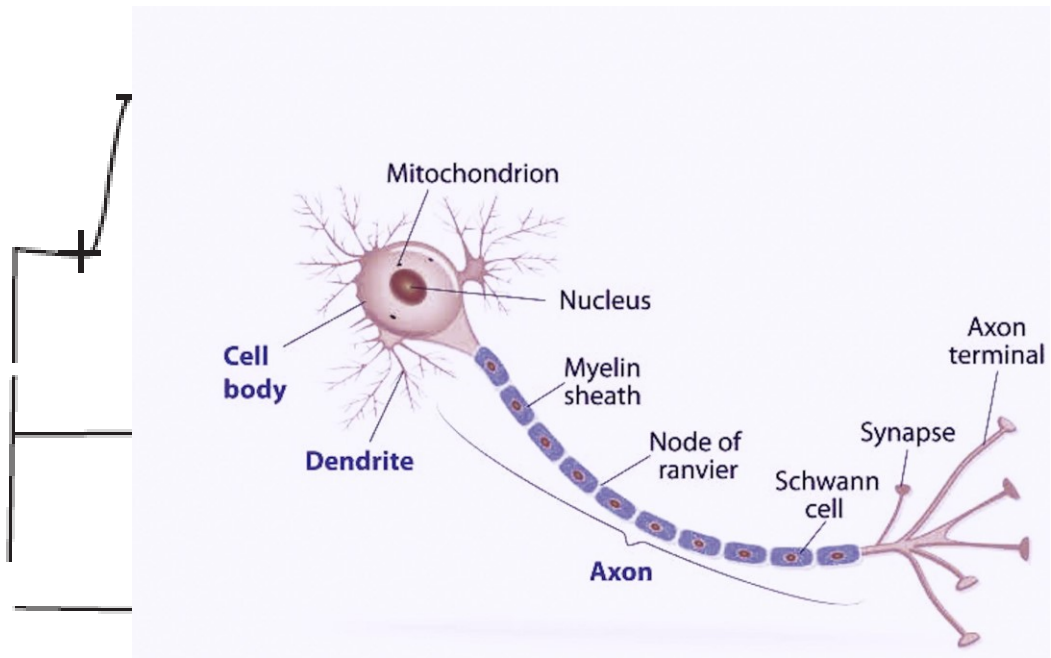
Riduzione d'ampiezza del potenziale motorio



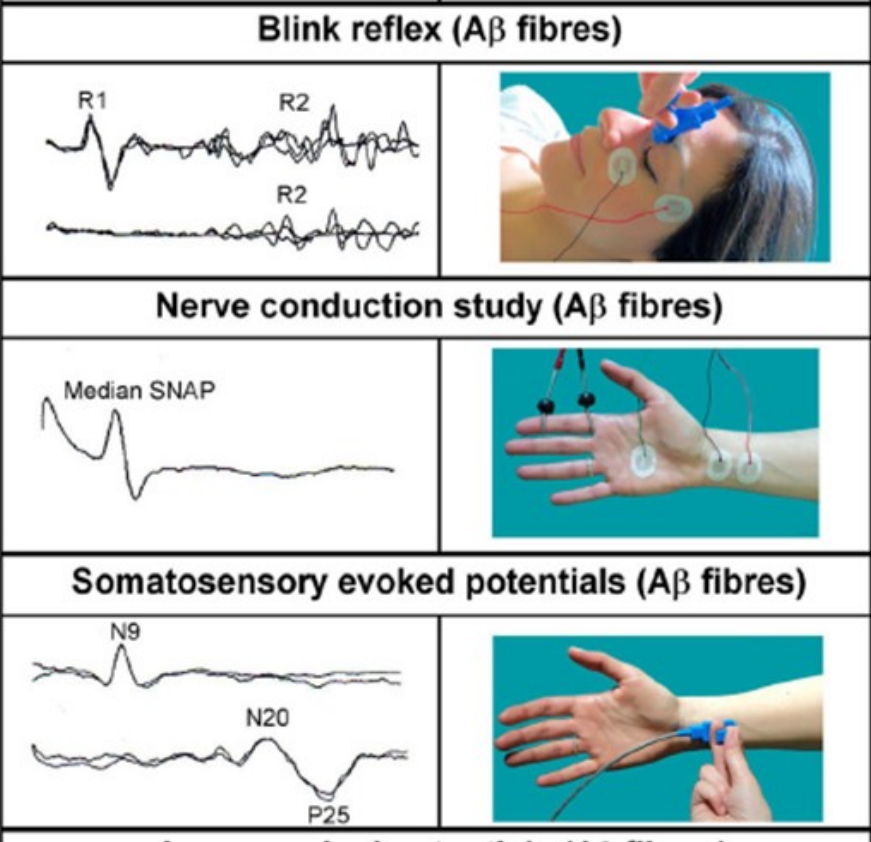
Assonale



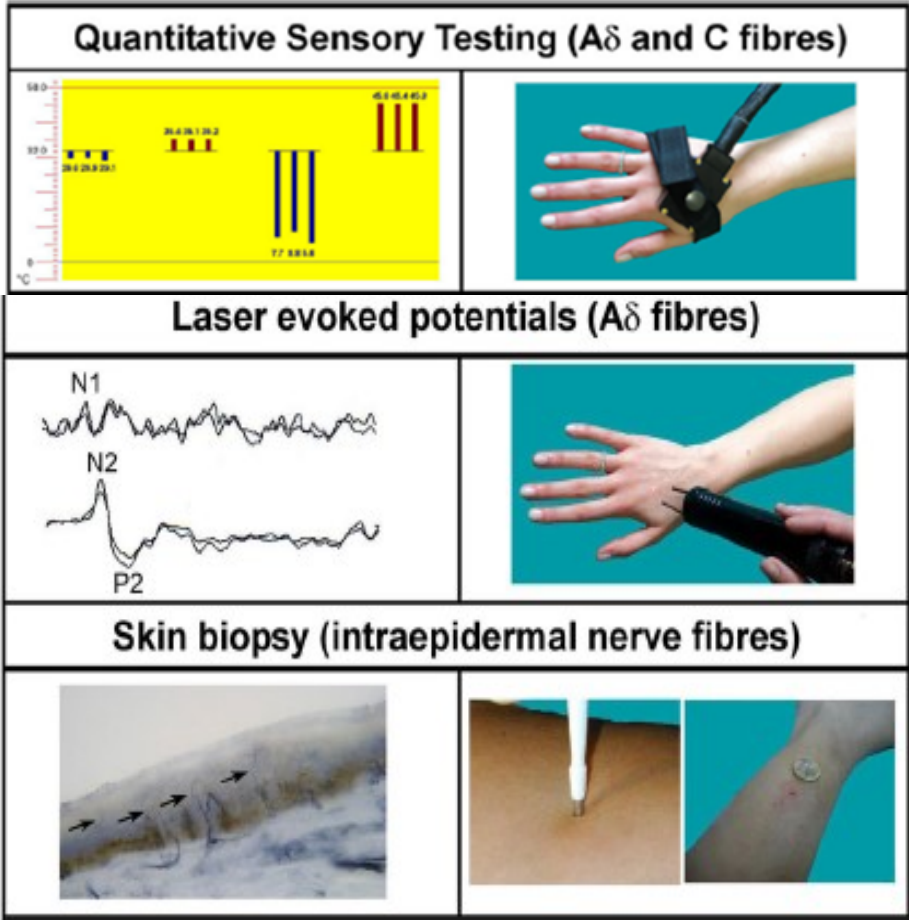
L'esame elettrofisiologico



L'esame elettrofisiologico



$A\beta$



C

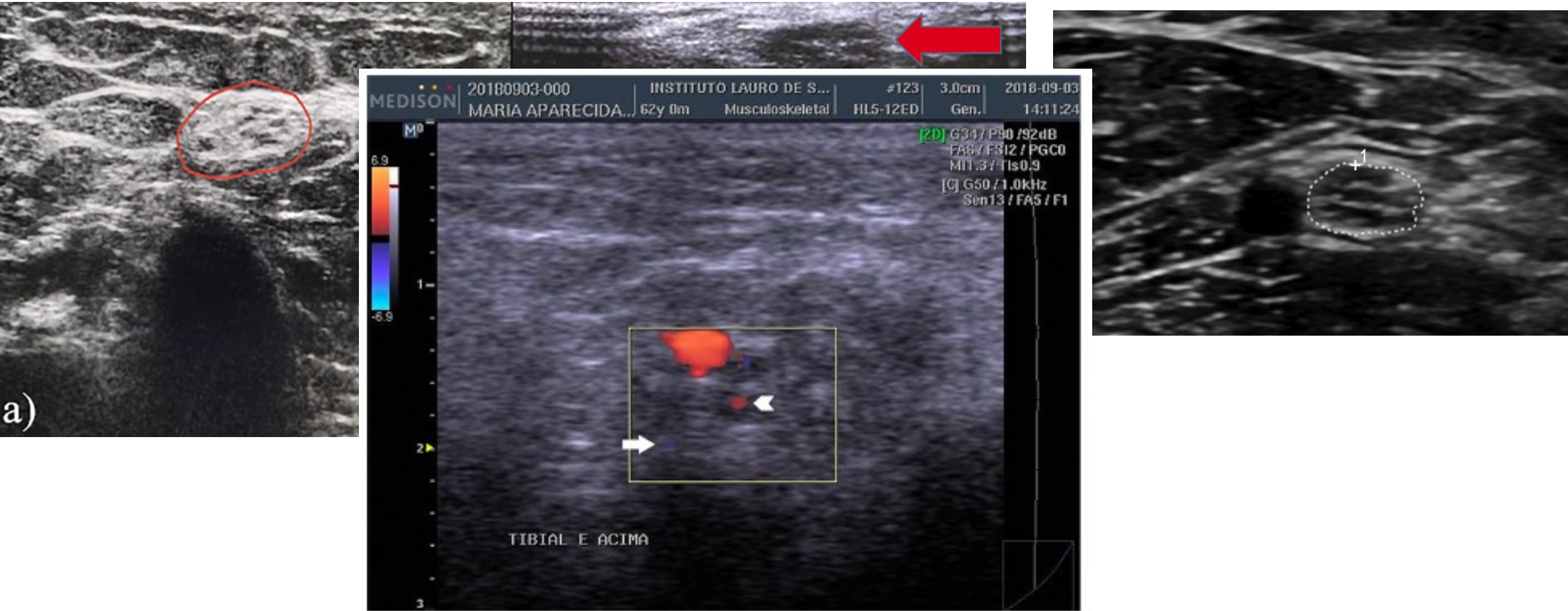


Unmyelinated (C fiber)

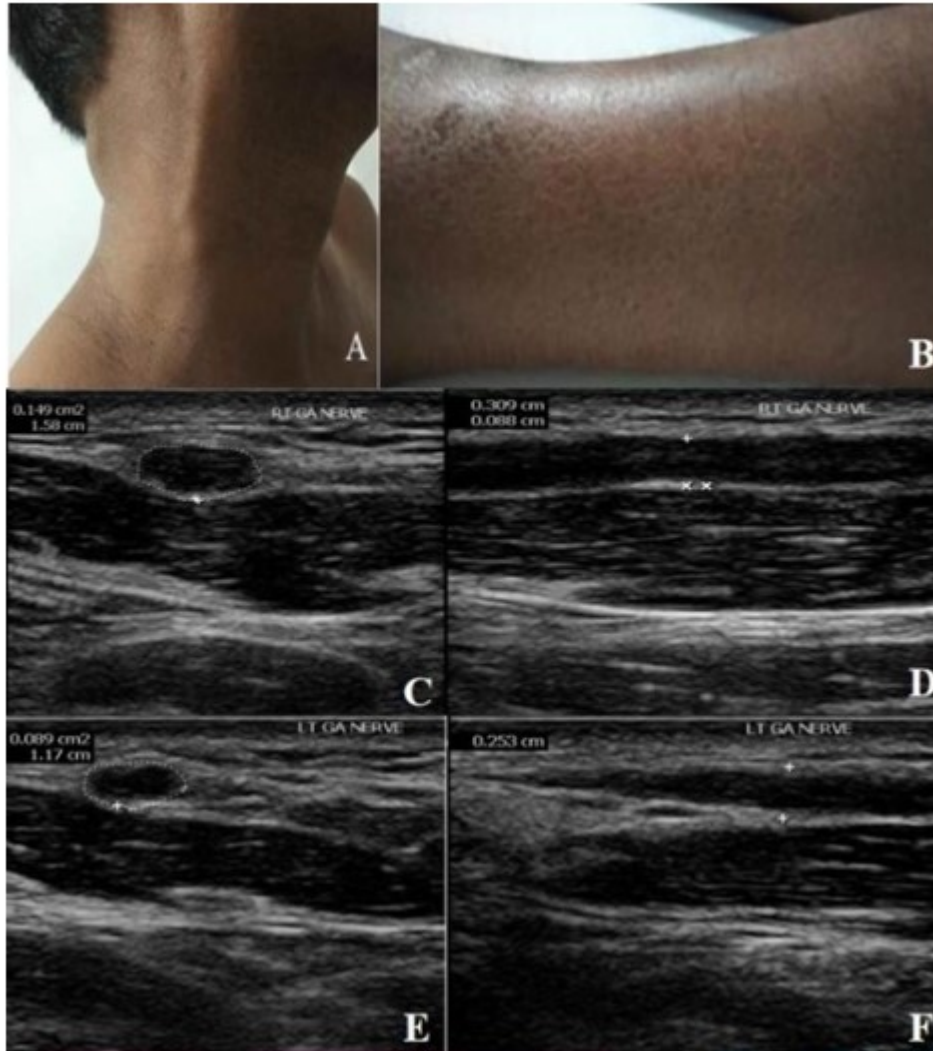


$A\delta$

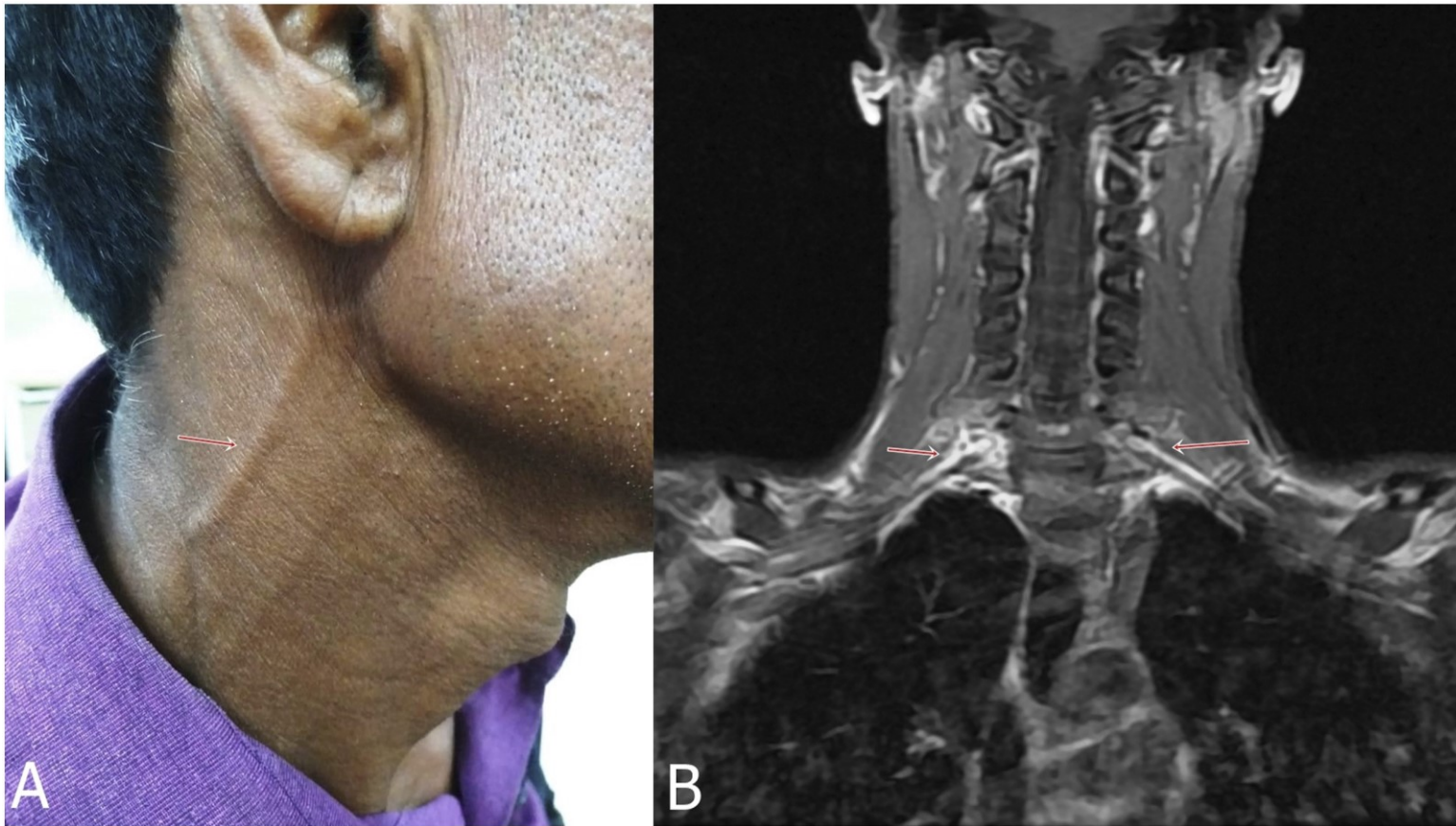




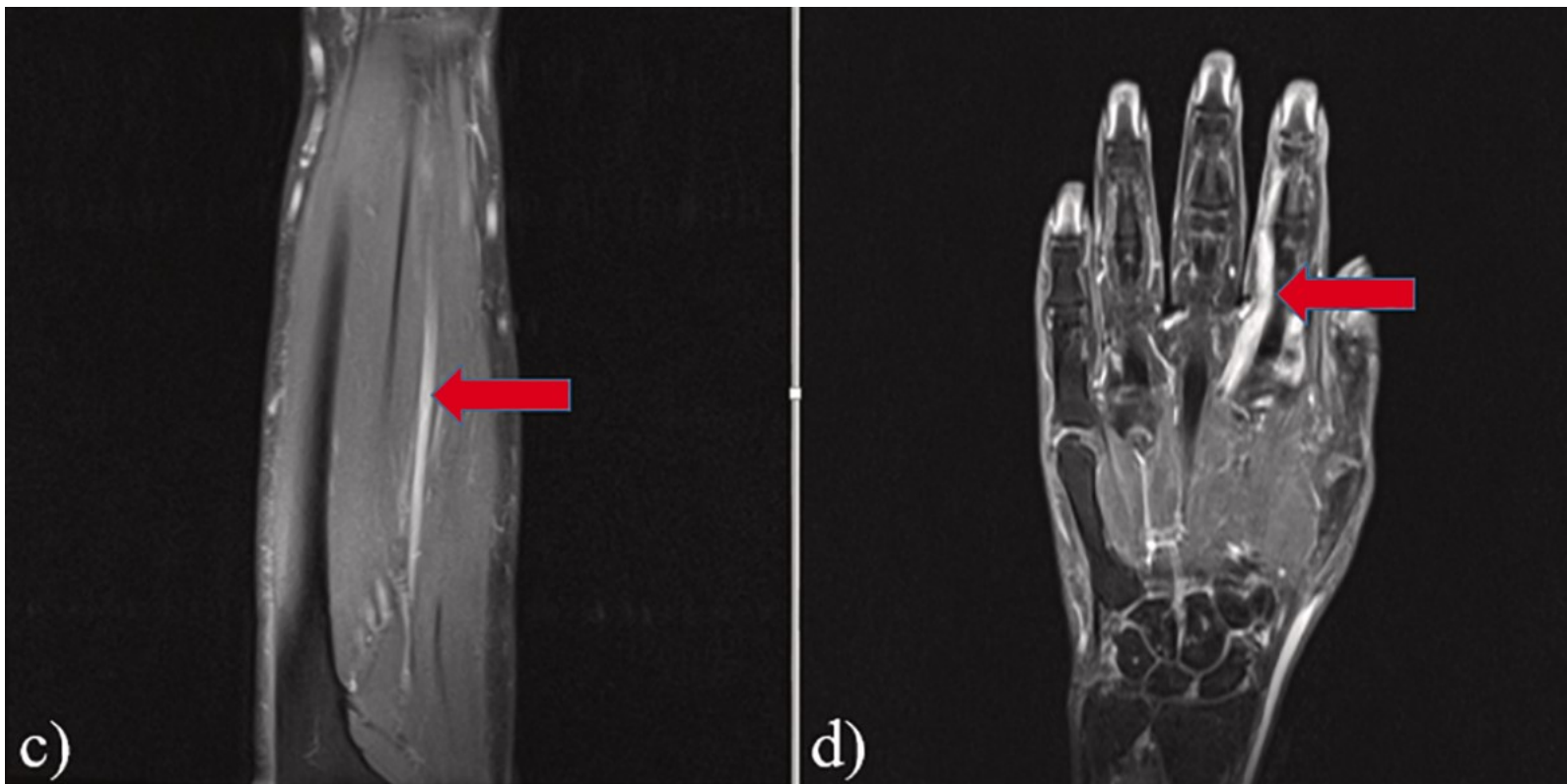
Akita et al 2021

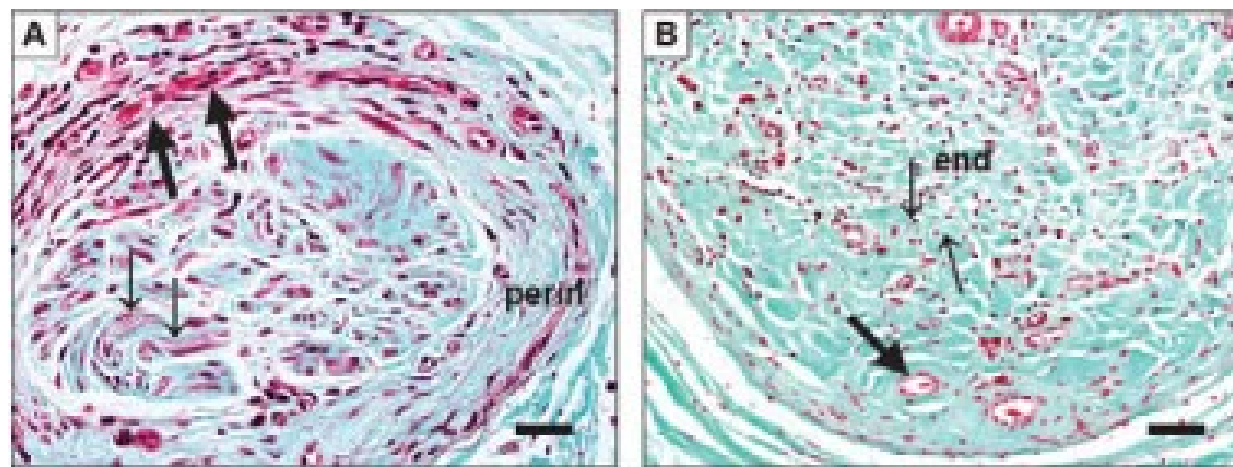


Reddy et al 2022



Garg et al 2022





Cruz et al 2012



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Diagnostic Microbiology & Infectious Disease

journal homepage: www.elsevier.com/locate/diagmicrobio



Pure neuritic leprosy: Latest advancements and diagnostic modalities

Diagnosis of Pure Neuritic Leprosy

Nadia Razdan^{a,b}, Barghavi. V^a, Soumi Sadhu^{a,*}

^a Department of Life Sciences, Sharda School of Basic Sciences and Research, Sharda University, Greater Noida, UP 201310, India

^b Stanley Browne Research Laboratory, TLM Hospital, Shahdara, Delhi, India

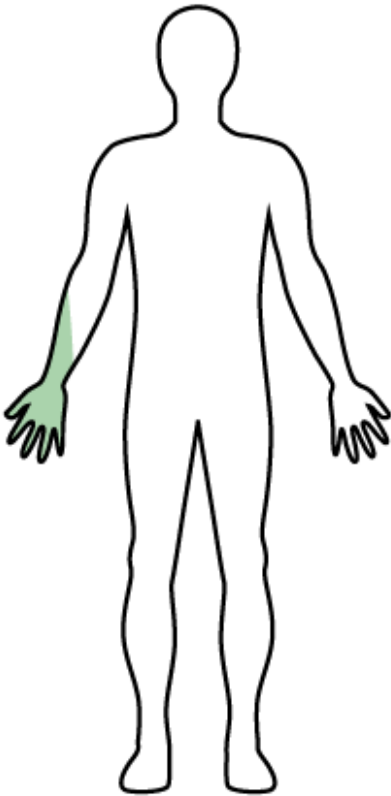
ARTICLE INFO

Keywords:

- Pure neuritic leprosy (PNL)
- Acid-fast bacilli (AFB)
- Nerve biopsy
- Multiplex polymerase chain reaction (M-PCR)
- Nerve conduction studies (NCS)
- High-resolution ultrasonography (HRUS)
- Non-invasive techniques

ABSTRACT

Pure neuritic leprosy (PNL) is characterized by exclusive peripheral neuropathy without dermatological alterations. Diagnosis is difficult since skin lesions and acid-fast bacilli (AFB) in slit smears are absent. Presently, the gold standard for diagnosis is the histopathological examination of peripheral nerve biopsy. Even then, the detection of bacteria is difficult, and histological findings may be non-specific. Nerve biopsy is an invasive procedure that is possible only in specialized centers and limited to certain sensory nerves. Therefore, the establishment of serological, immunological, and molecular laboratory tests could be more beneficial for diagnosing pure neuritic leprosy to achieve effective treatment and reduction in its consequent disabilities. This review suggests that the presence of *Mycobacterium leprae* (*M.leprae*) in PNL cases can be proven by using non-invasive procedures, viz., multiplex polymerase chain reaction (M-PCR), serological findings, immunological profiling, and improved nerve-imaging. Findings also indicate the necessity for improving the sensitivity of PCR and further research on specificity in ruling out other clinical conditions that may mimic PNL.



MONO-neuropathy



Terapia: focus sulla neuropatia

National Hansen's Disease Program (NHDP) ^{*[1,2]}

Regimen	Dose	Duration
Tuberculoid ("paucibacillary"): TT and BT		
Dapsone [¶]	100 mg once daily	12 months
Rifampin [*]	600 mg once daily	
Lepromatous ("multibacillary"): LL, BL, BB		
Dapsone [¶]	100 mg once daily	24 months
Rifampin [*]	600 mg once daily	
Clofazimine ^Δ	50 mg once daily	

Nerves
~~Something happens to the skin:~~



grazie per l'attenzione