

LE ANASTOMOSI ED I RAMI ACCESSORI

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INNERVAZIONI ANOMALE

- Anomalie della innervazione muscoli della mano (*Anastomosi di Riches-Cannieu*)
- Anastomosi mediano-ulnare (*Martin-Gruber*)
- Anastomosi ulnare-mediano

Innervazione "mano"



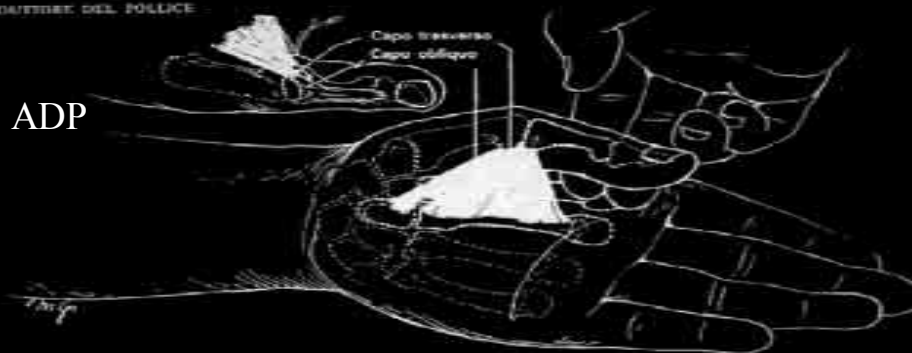
FLESSORE BREVE DEL POLLICE

FBP



ADDUTTORE DEL POLLICE

ADP



Innervazione “mano”

m.Abduttore Breve Pollice (ABP)
m.Opponente del pollice (OP) —————▶ **N. MEDIANO**

m.Adduttore Breve Pollice (ADP)
m.I interosseo Dorsale (I int) —————▶ **N. ULNARE**
m.Abduttore V dito (ADM)

m.Flessore Breve Pollice (FBP) —————▶ **N. MEDIANO e ULNARE**

Anastomosi Riches-Cannieu

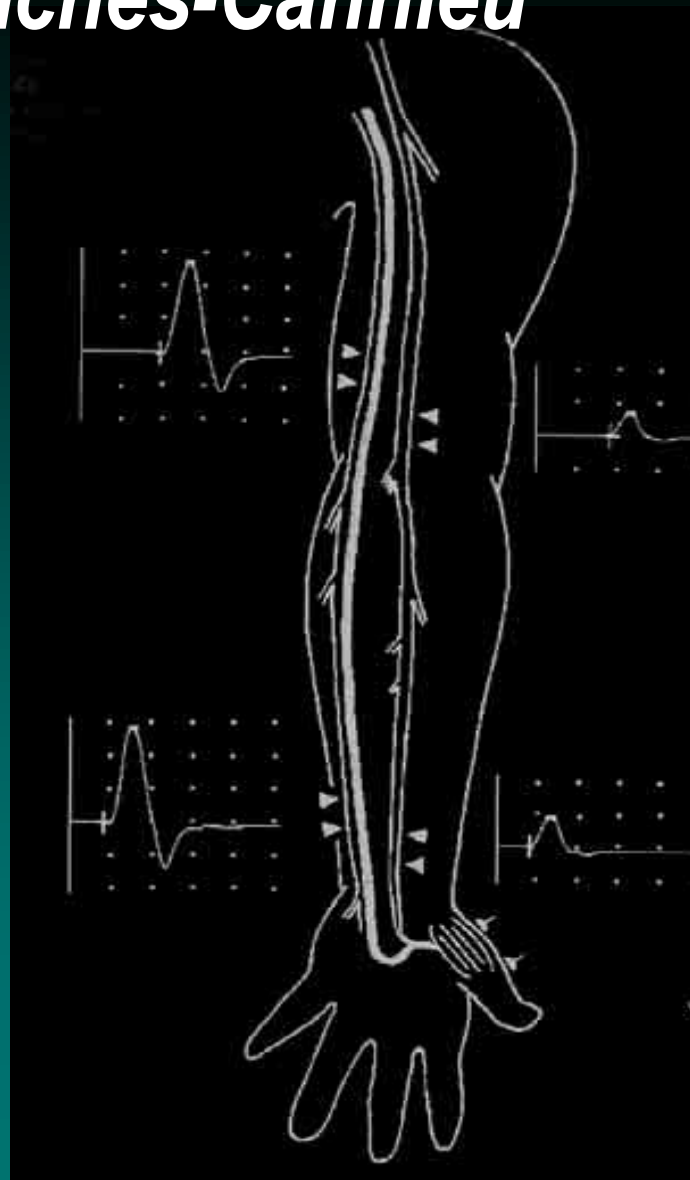
Sec. Roundtree (20% su 226 casi):

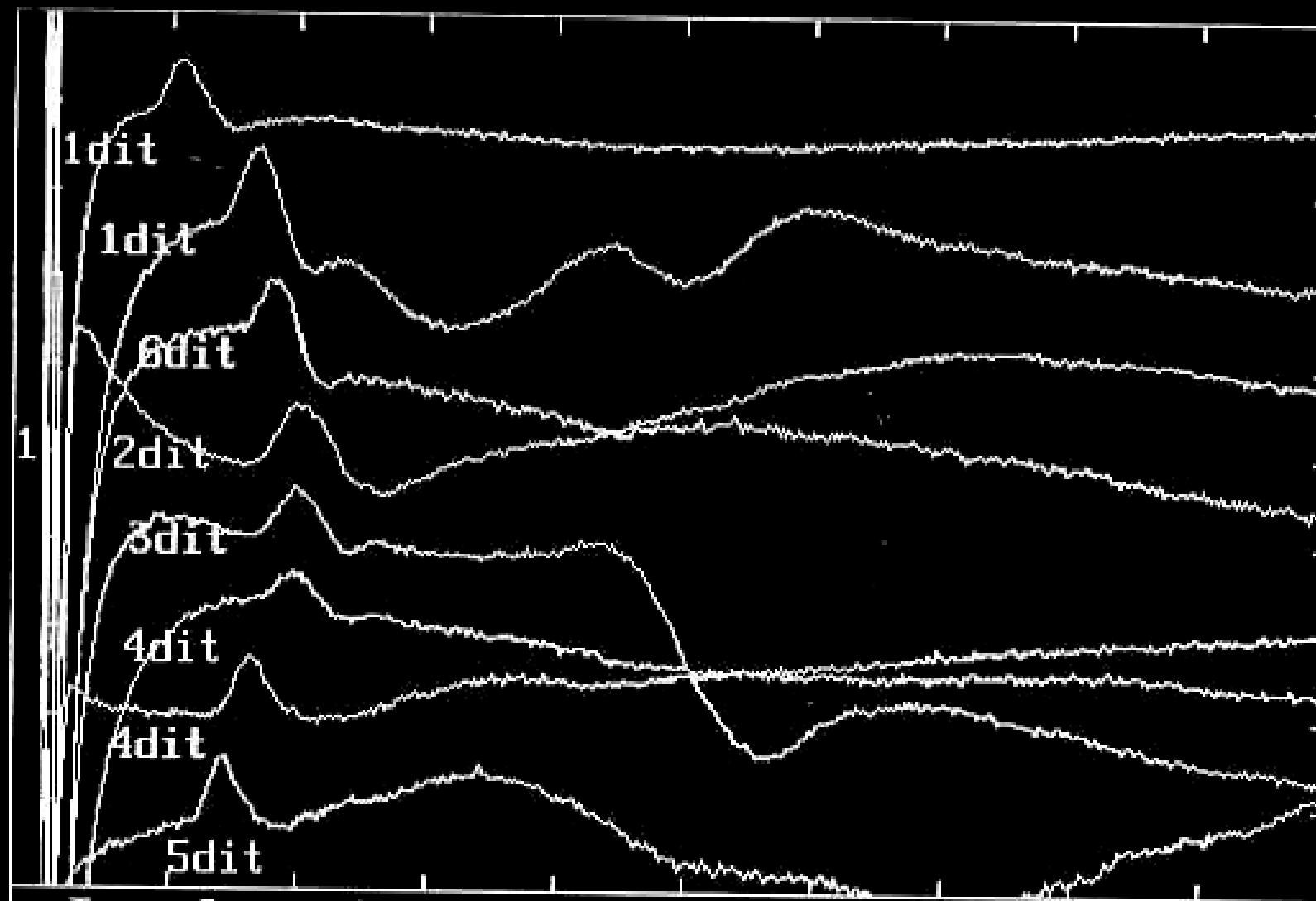
- 33% ABP, OP, FBP → med
- 32% ABP, OP → med ; FBP → uln
- 15% ABP, OP → med ; FBP → med + uln
- 2% ABP, OP, FBP → uln
- 2% ABP, OP, FBP, ADP → med ; I int → uln
- Eccezionale → mano “mediana” (ipotenar)

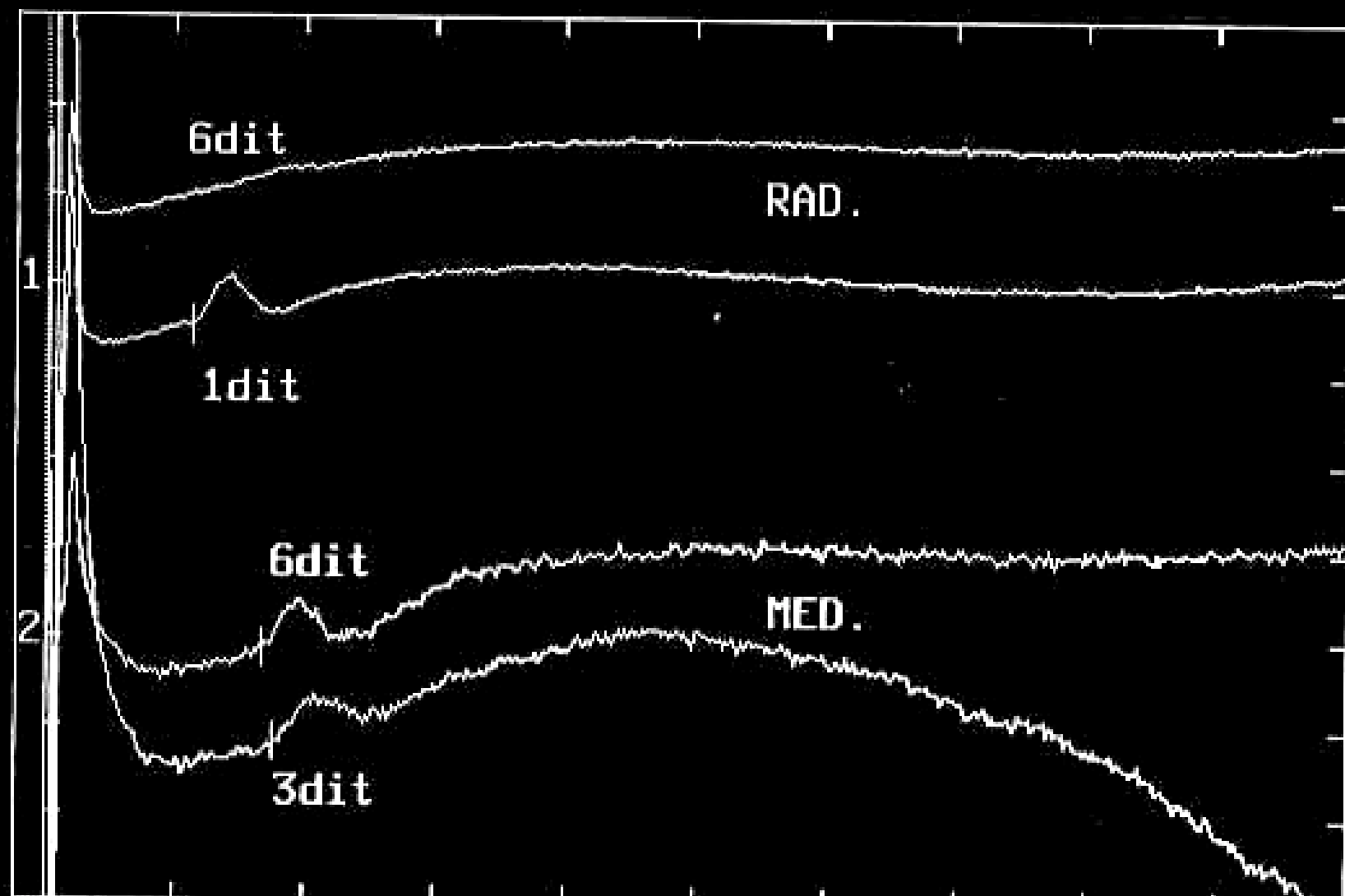
Anastomosi Riches-Cannieu

Mano ULNARE:

- PURA
- PARZIALE
- Ridotti CMAP med (normali VDC, disp.temp. e lat.dist.)
- SAP normali



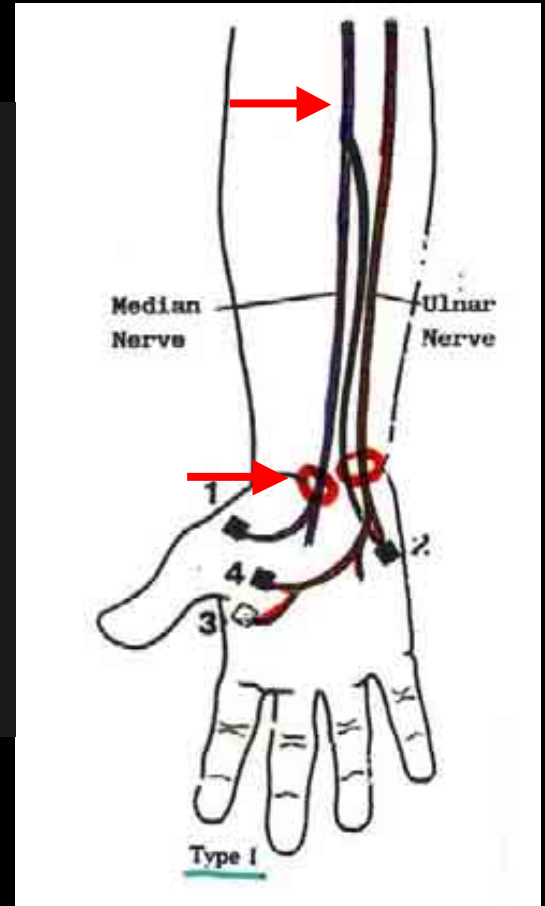
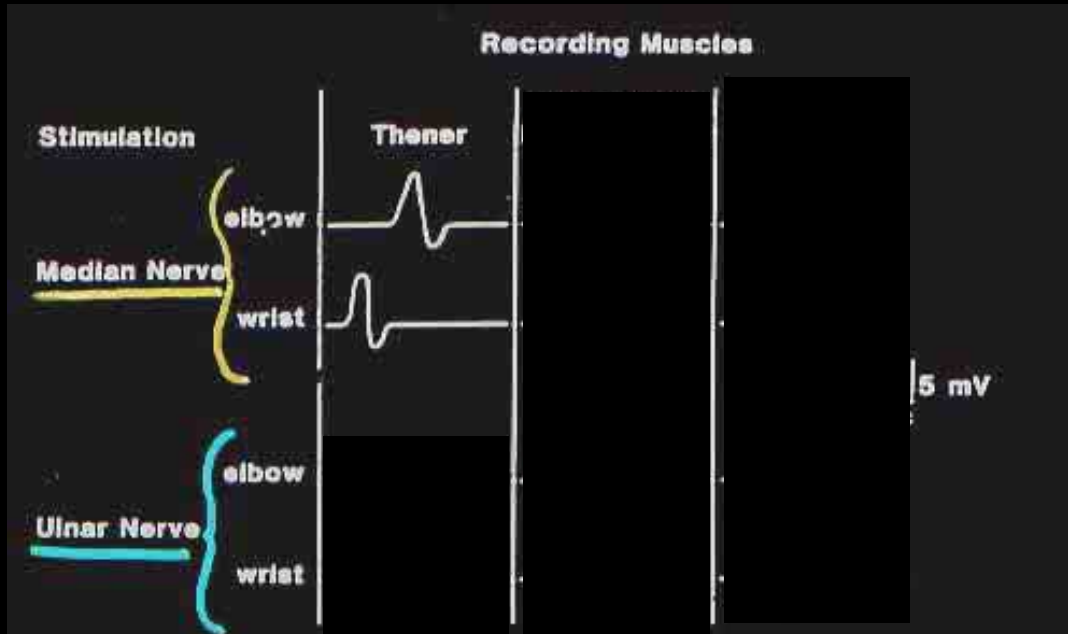




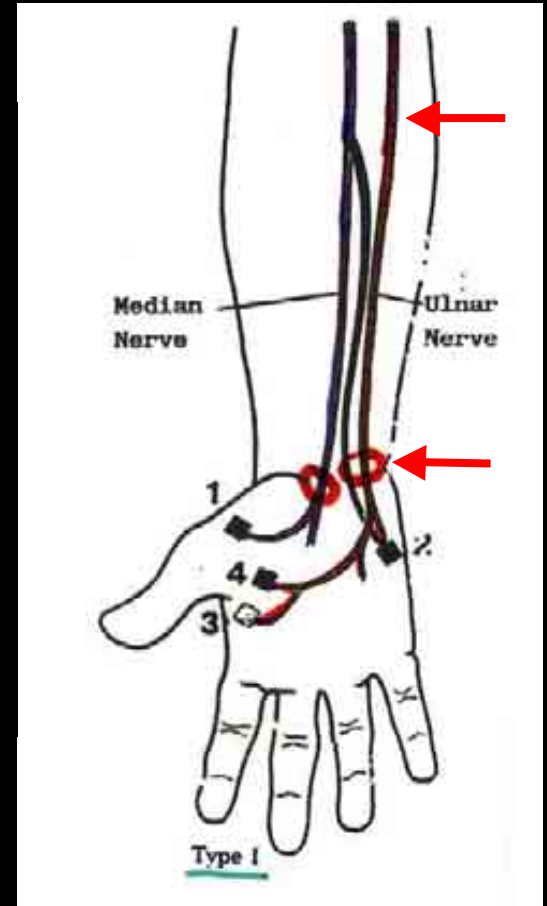
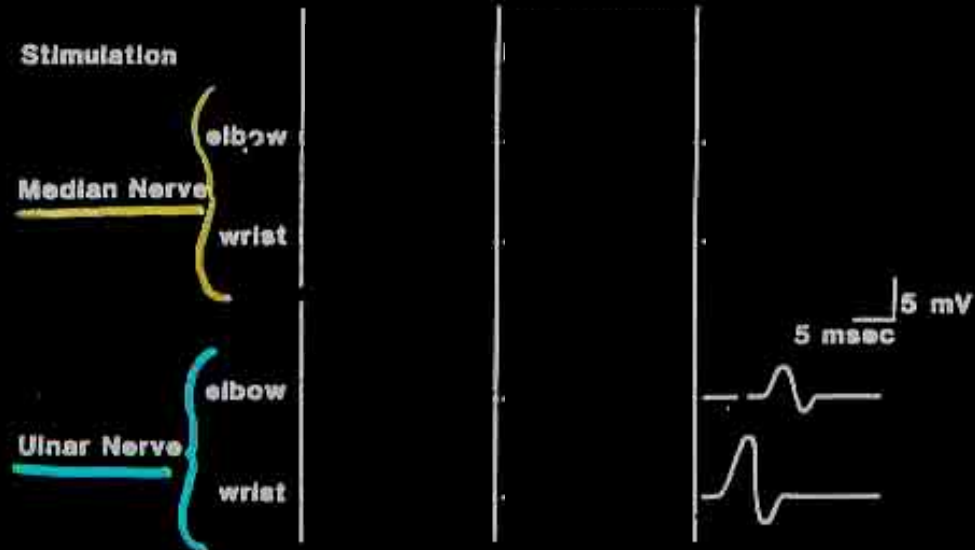
Anastomosi Med-Uln (Martin-Gruber)

- Molto comune (15-31 % popolazione)
- Spesso bilaterali, ma anche unilaterali
- Anastomosi generalmente avambraccio (n.interosseo anteriore)
- Possibile anche prossimale (plesso) anche se rara
- Criteri per MGA:
 - *Amp CMAP mediano: gomito>polso*
 - *Amp CMAP ulnare: polso>gomito*
 - *Registrare sempre contemporaneamente da m.ABP, I int, ADM*
- Pitfalls:
 - *Diffusione Stimolo (polso e/o gomito)*
 - *Durata Stimolo*

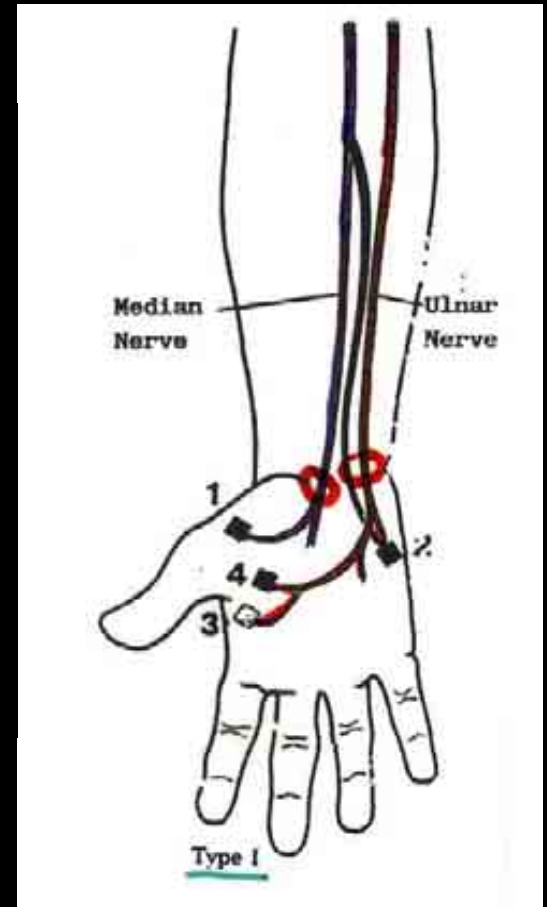
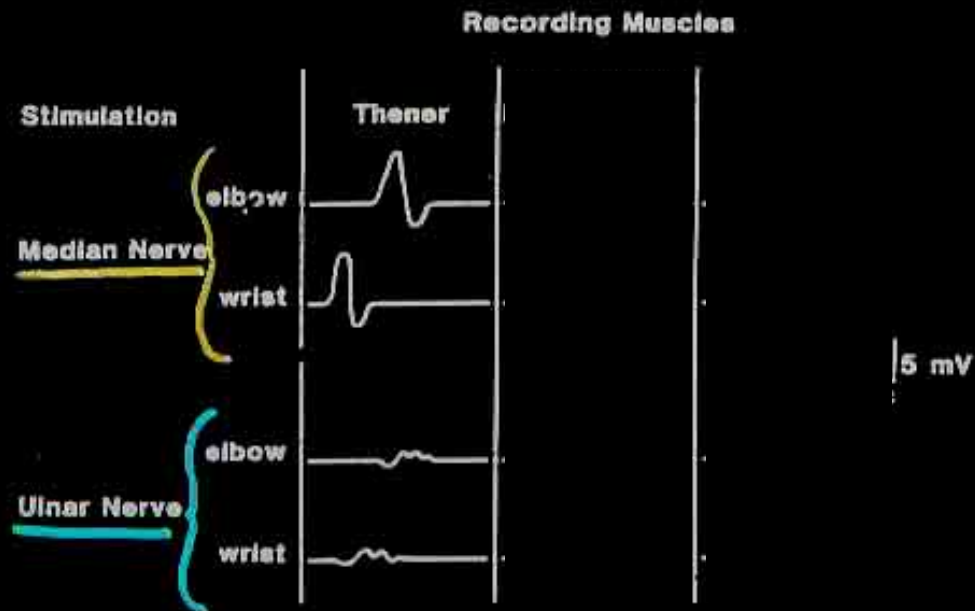
MGA tipo I



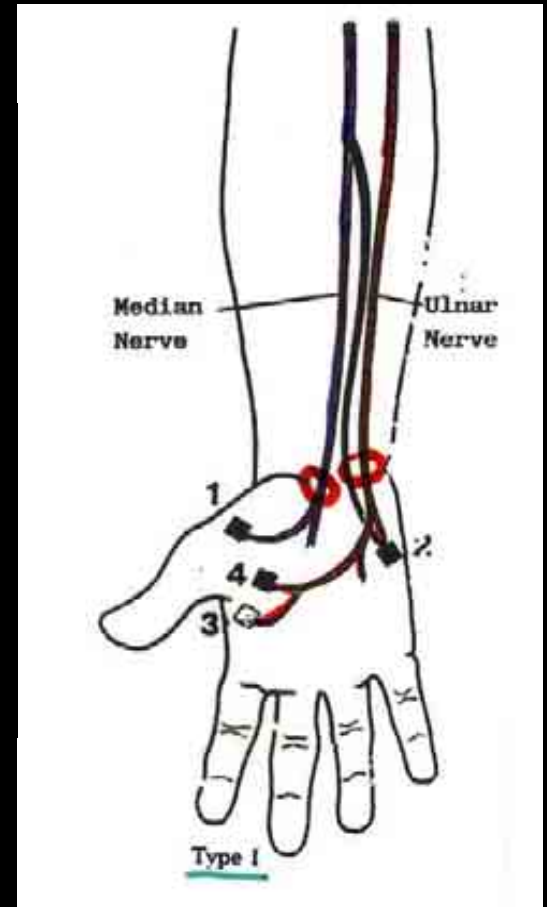
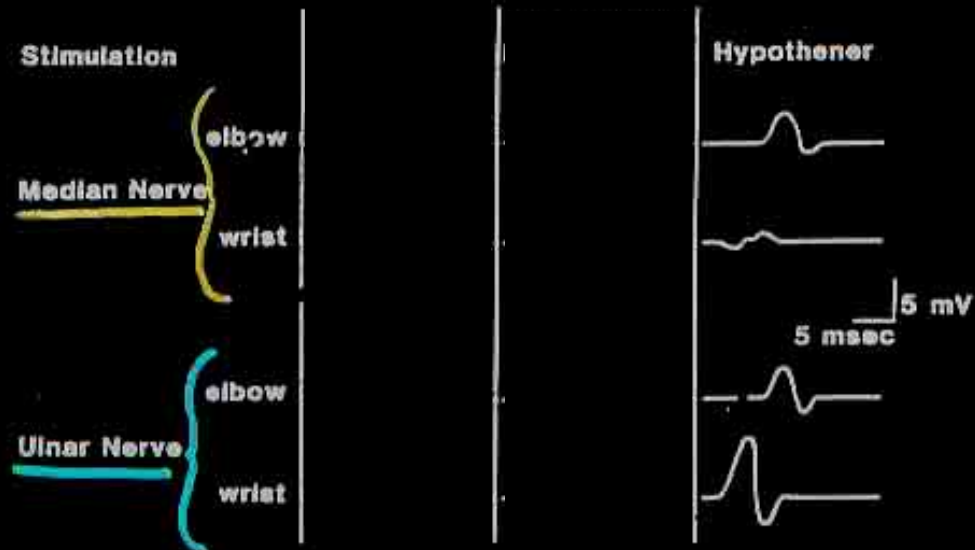
MGA tipo I



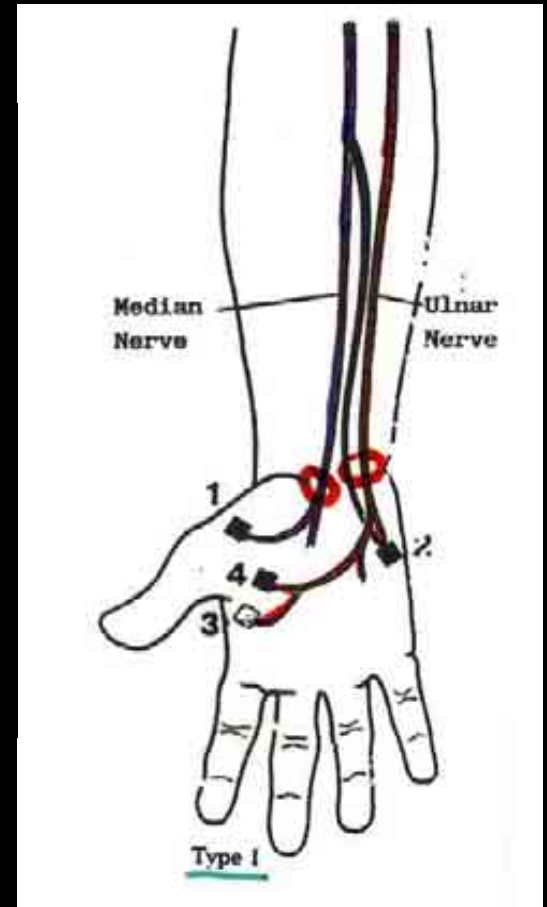
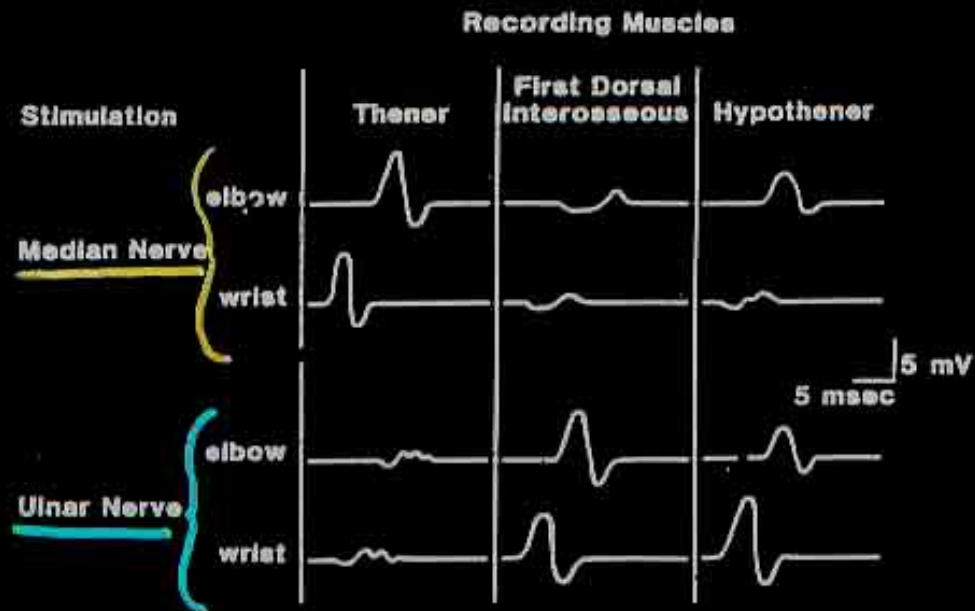
MGA tipo I



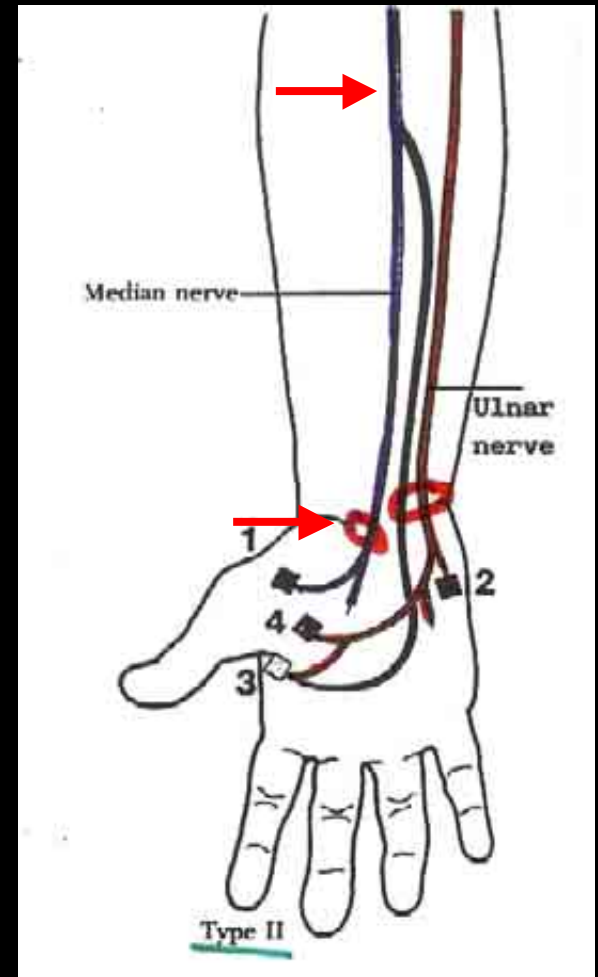
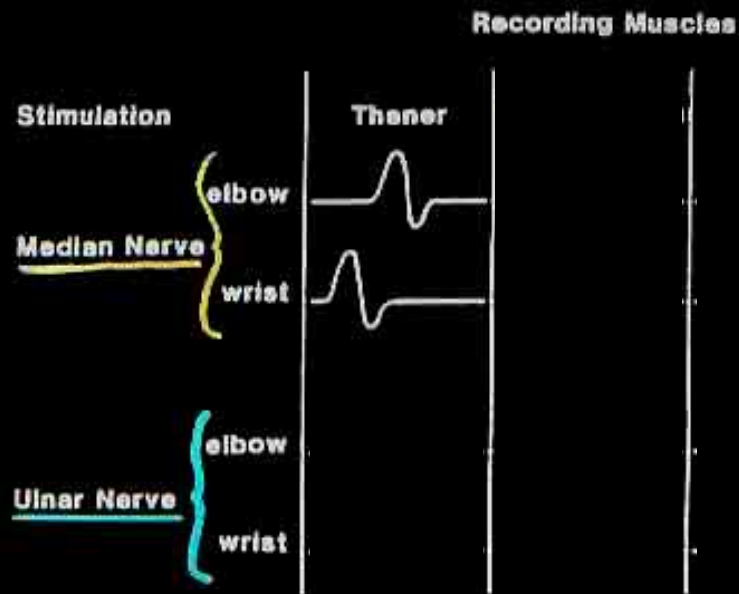
MGA tipo I



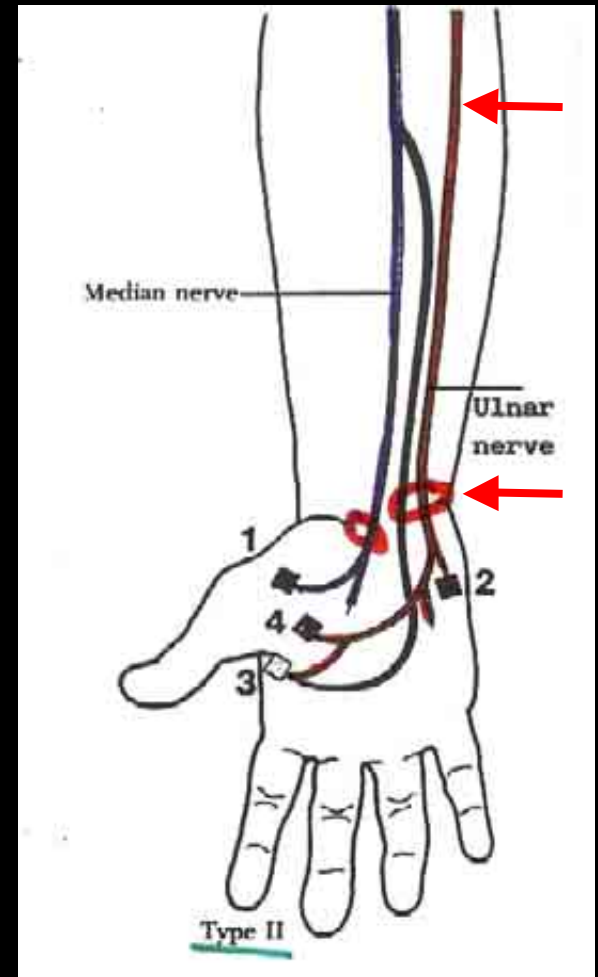
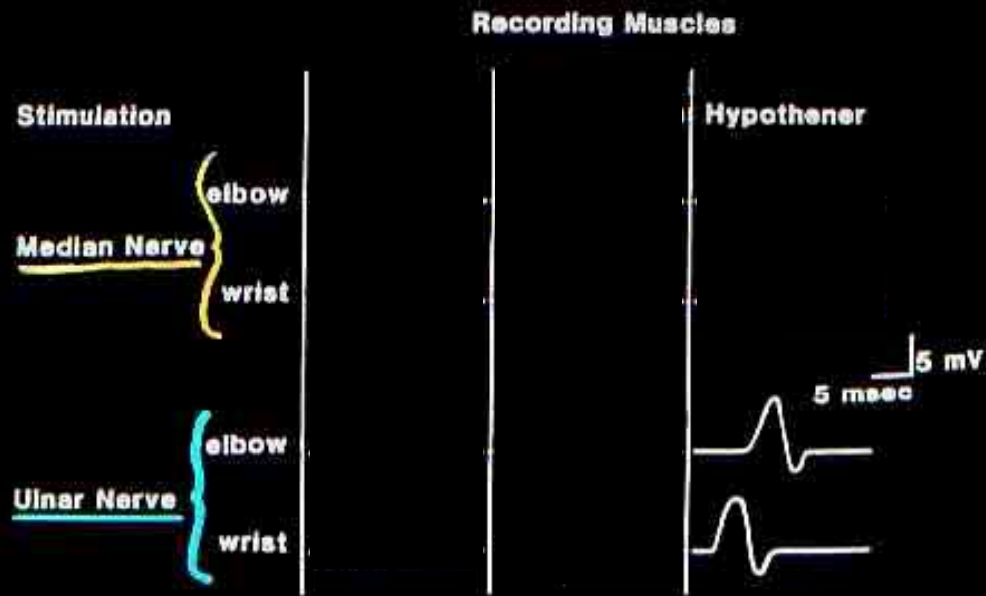
MGA tipo I



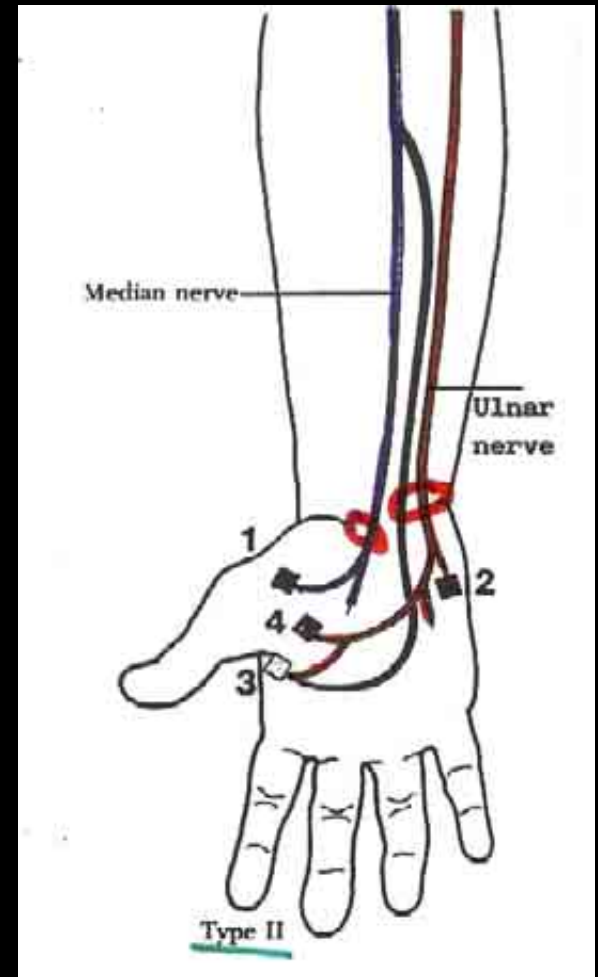
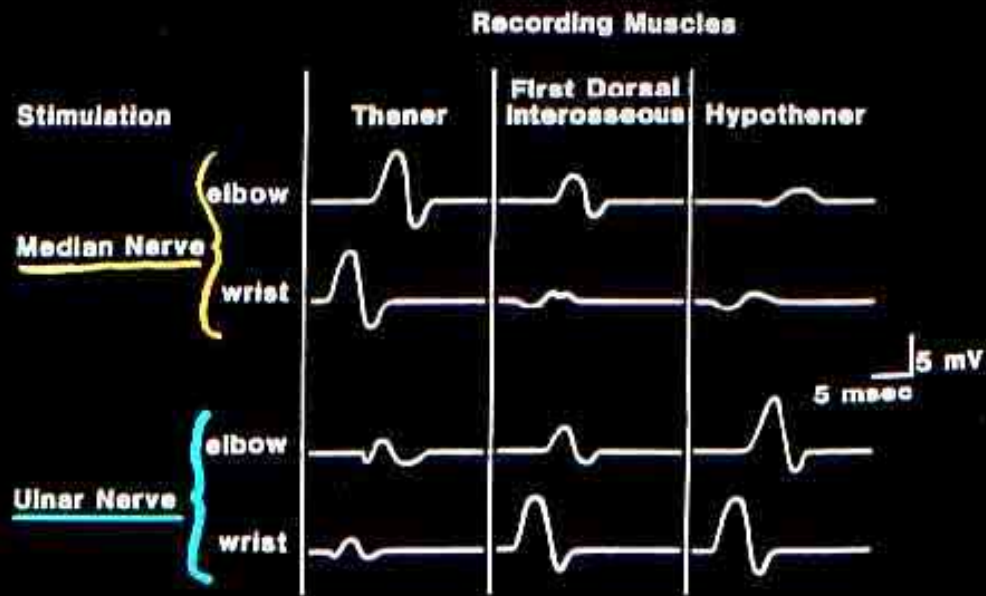
MGA tipo II



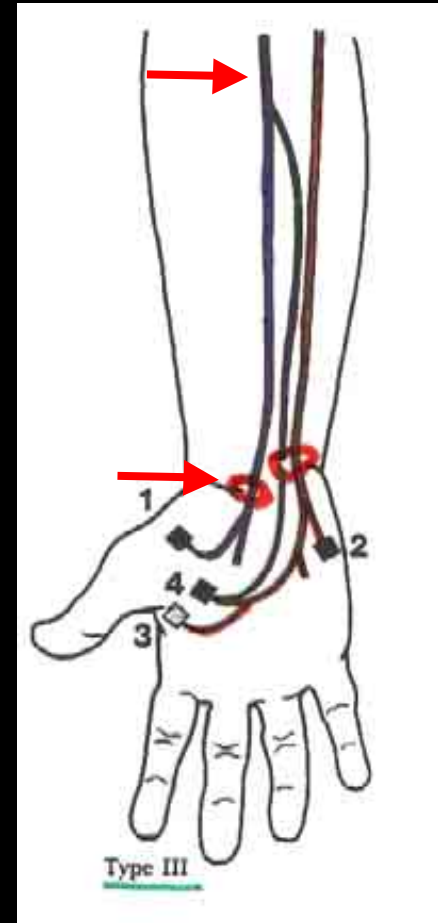
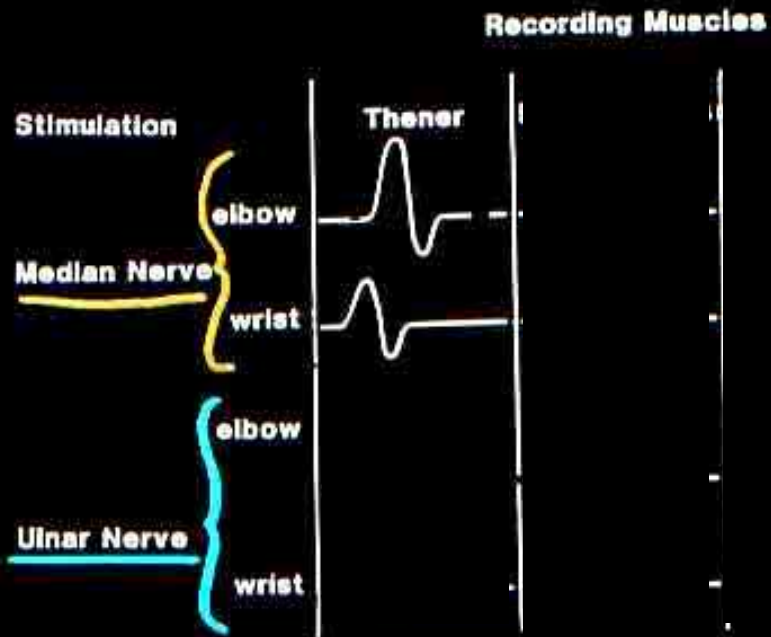
MGA tipo II



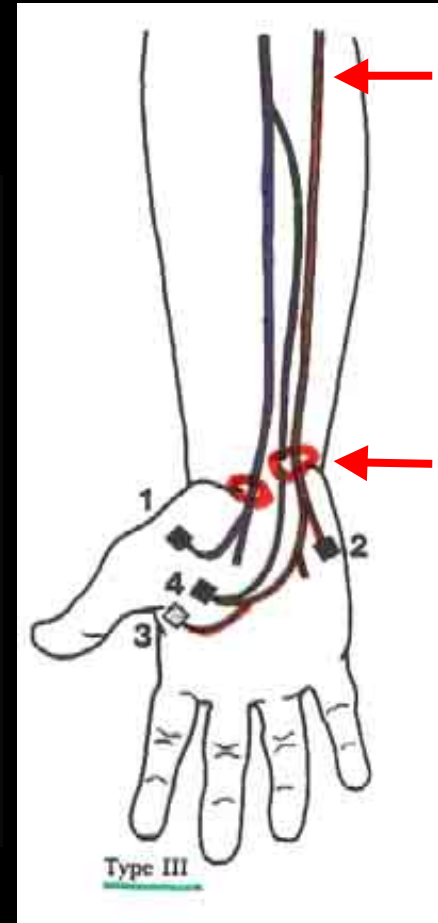
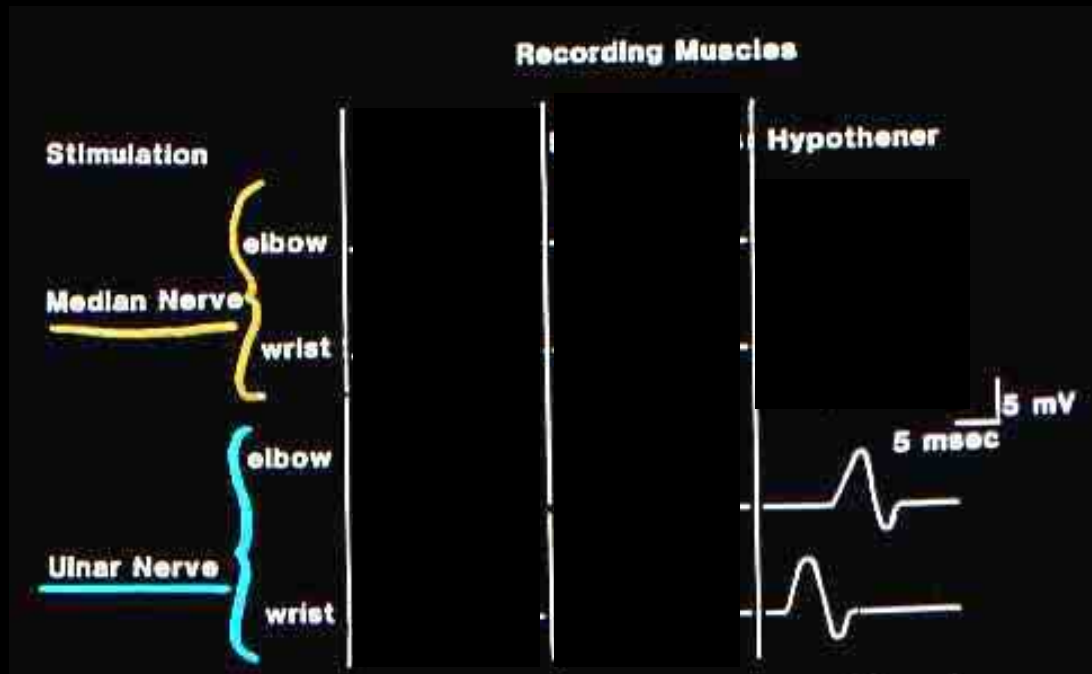
MGA tipo II



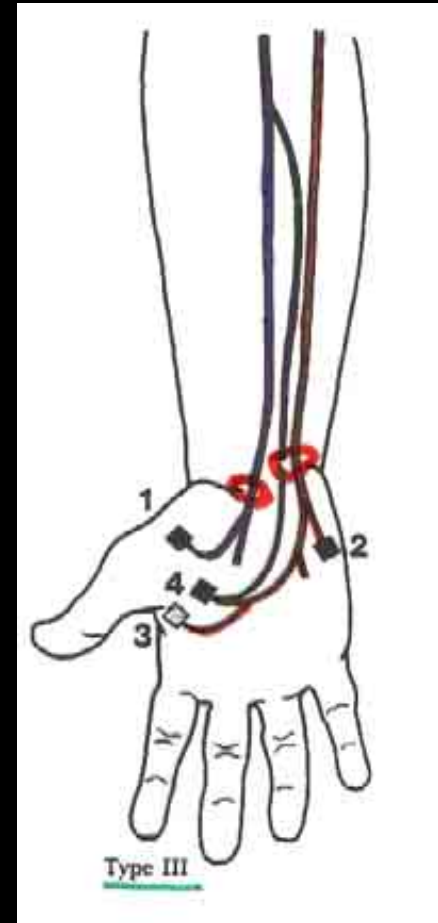
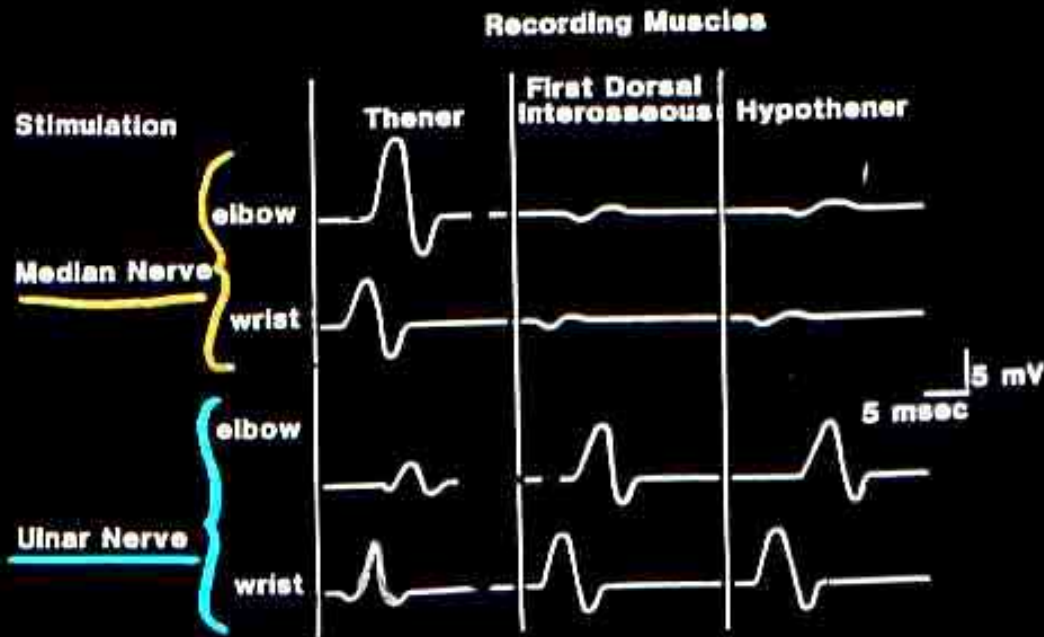
MGA tipo III



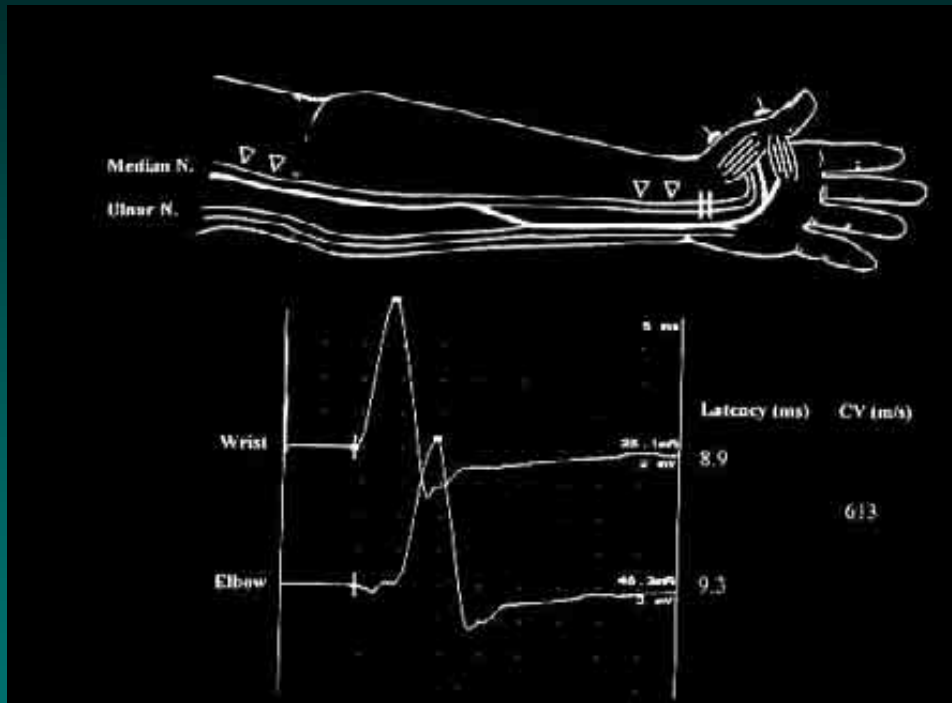
MGA tipo III



MGA tipo III

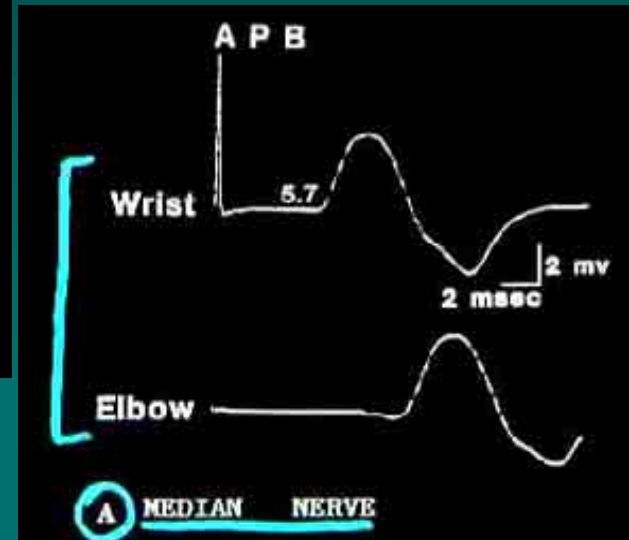


MGA in “condizioni patologiche”

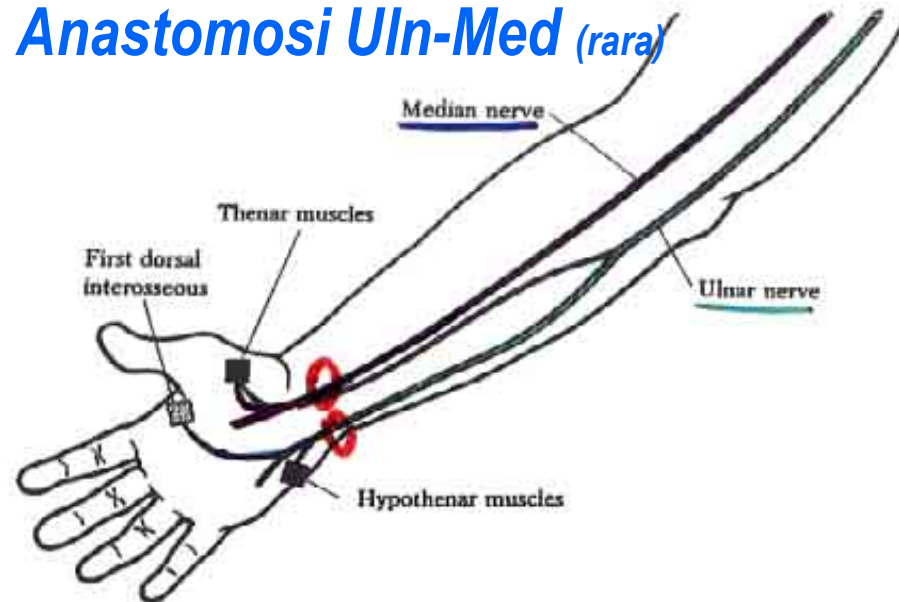


Sospettare se:

- *stim gomito evoca MAP tenere con lat. pos.*
- *stim gomito evoca più componenti*



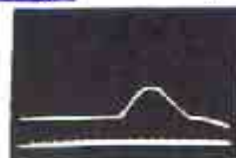
Anastomosi Uln-Med (rara)



M.M. EM. TENAR

MEDIAN NERVE

[2mV]



ULNAR NERVE

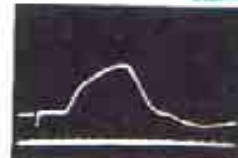


A

M.M. EM. IPO TENAR

ULNAR NERVE

[2mV]



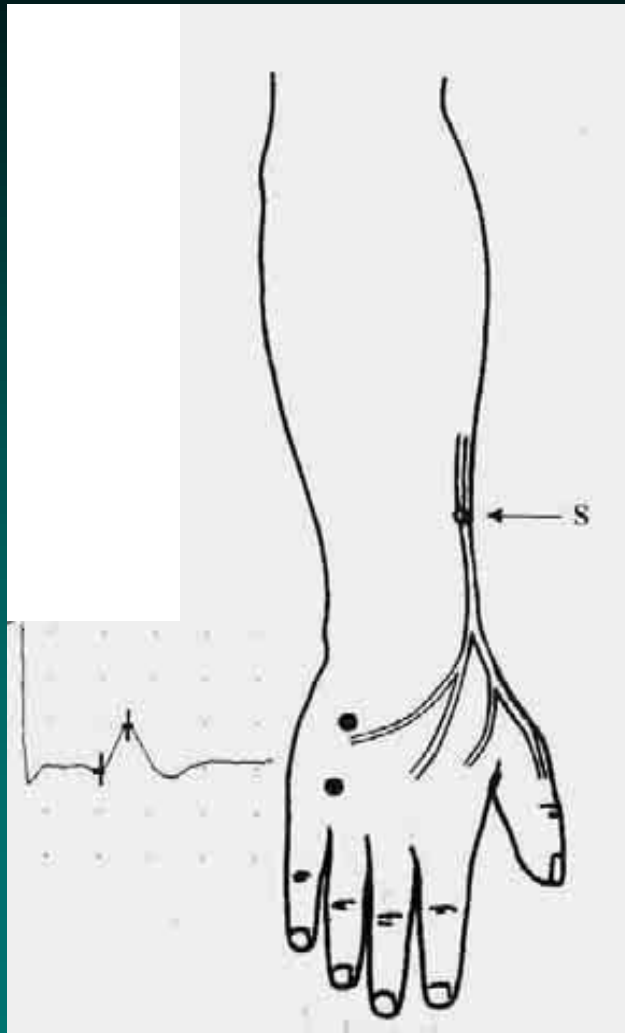
MEDIAN NERVE



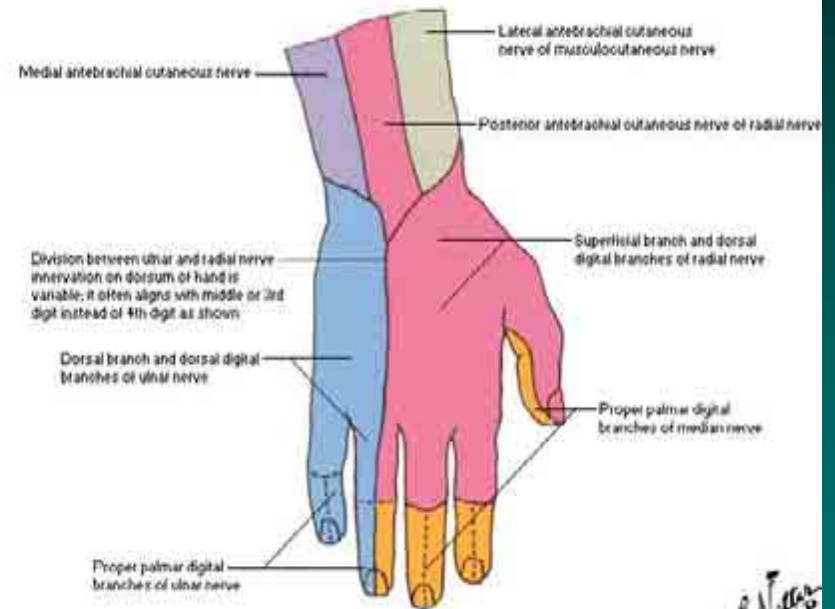
B

Ramo accessorio n.radiale sup.

(Freq. 3.5 %, 85% unilat.)



Cutaneous Nerves of Wrist and Hand Posterior [Dorsal] View



F. Netter M.D.

Ramo accessorio n. muscolo-cutaneo

RAMI Accessori:

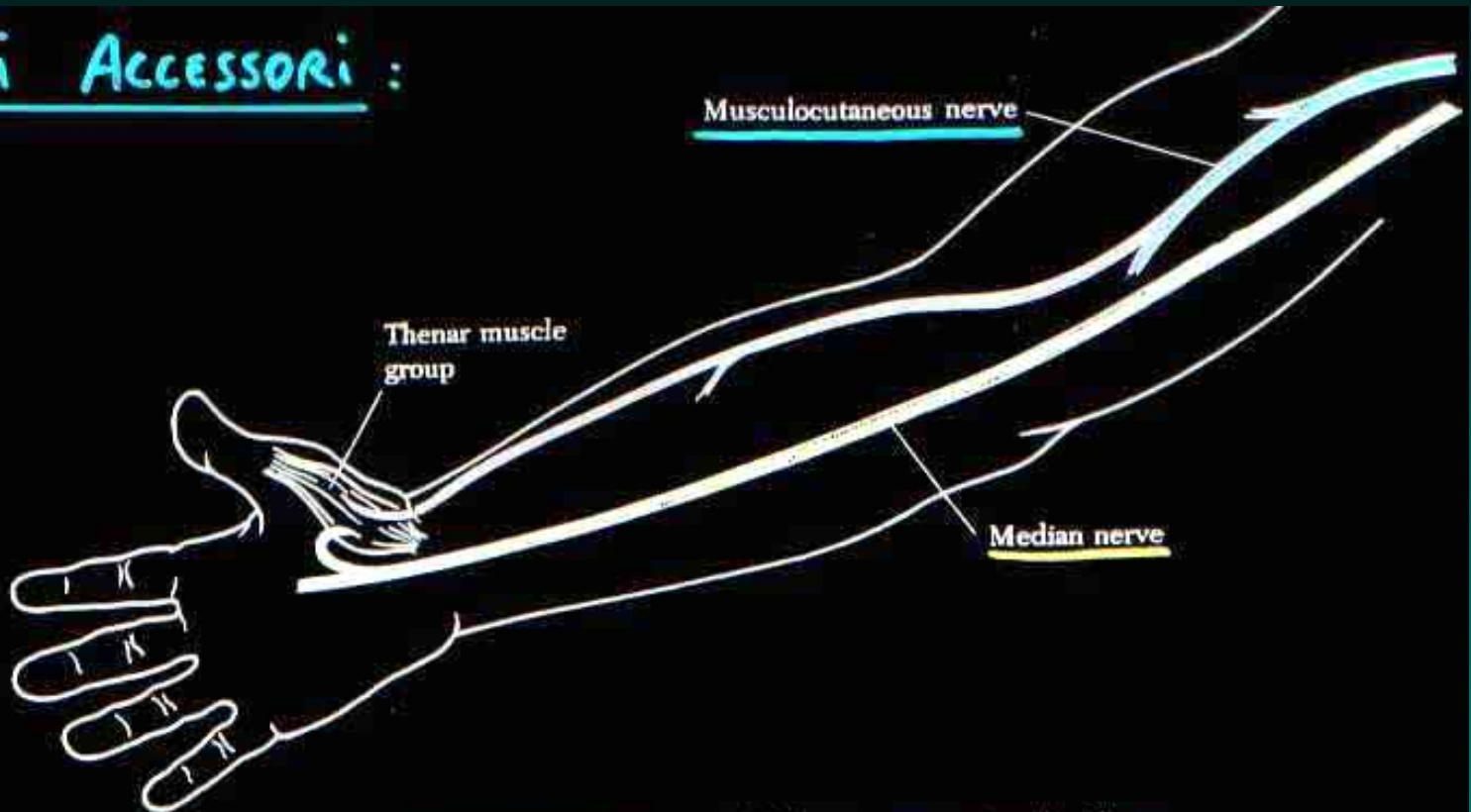
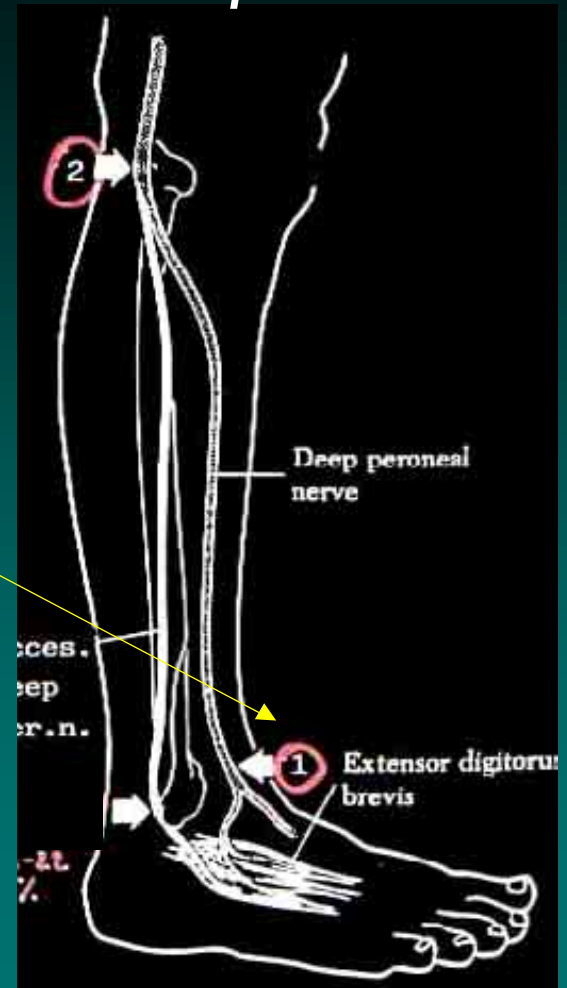
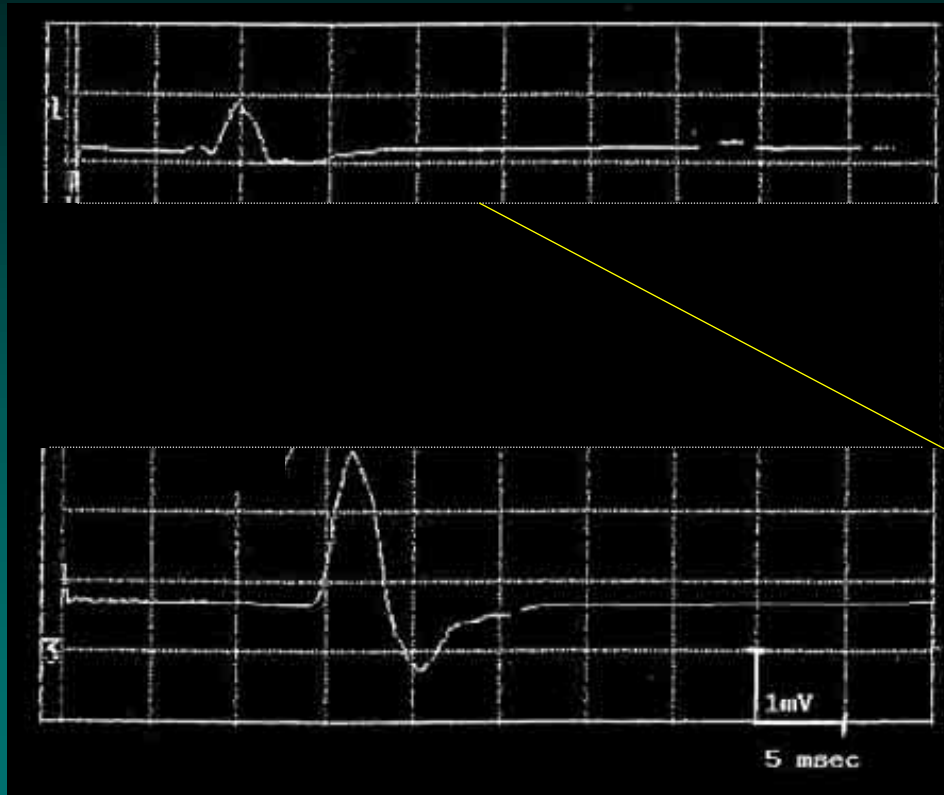
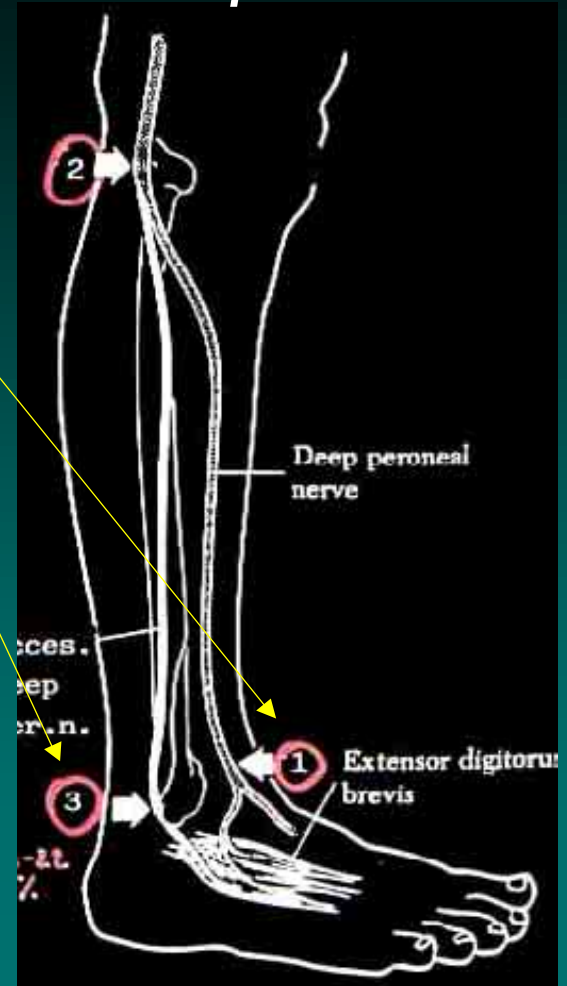
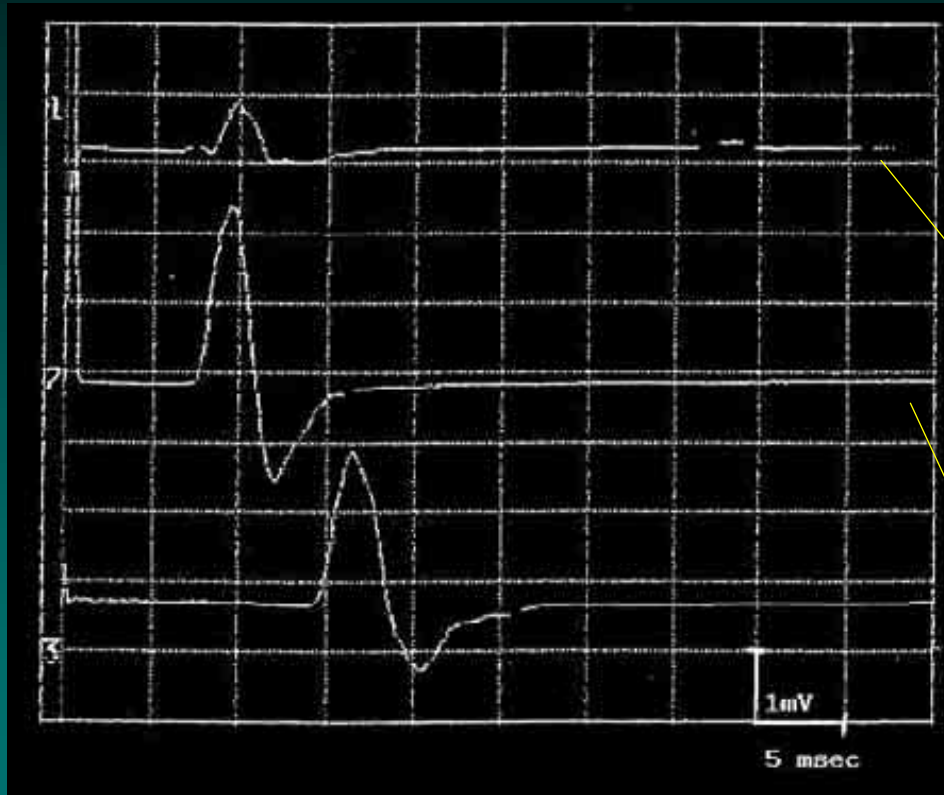


Figure 14.10 Anomalous musculocutaneous nerve (*solid line*) innervating the thenar muscles.

Ramo accessorio n.peroneo superficiale



Ramo accessorio n. peroneo superficiale



Pitfalls n. peroneo accessorio

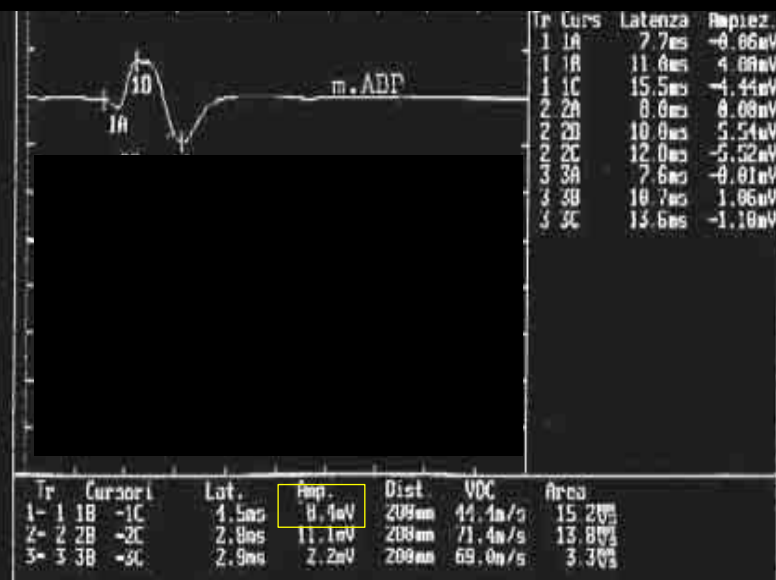
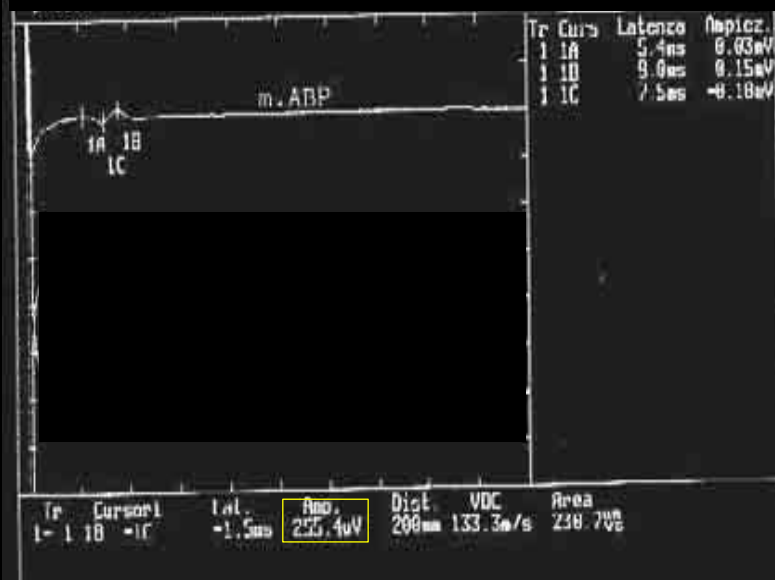
- Una lesione n.accessorio può causare denervazione EBD, interpretata come lesione n.peroneo profondo
- Una lesione n.peroneo profondo può essere interpretata come “parziale” per la presenza del n.accessorio
- In caso di “blocco” n. SPE al poplite: piccolo CMAP può non essere rilevabile per anomalia anatomica



N. MEDIANO

P O L S O

G O M I T O

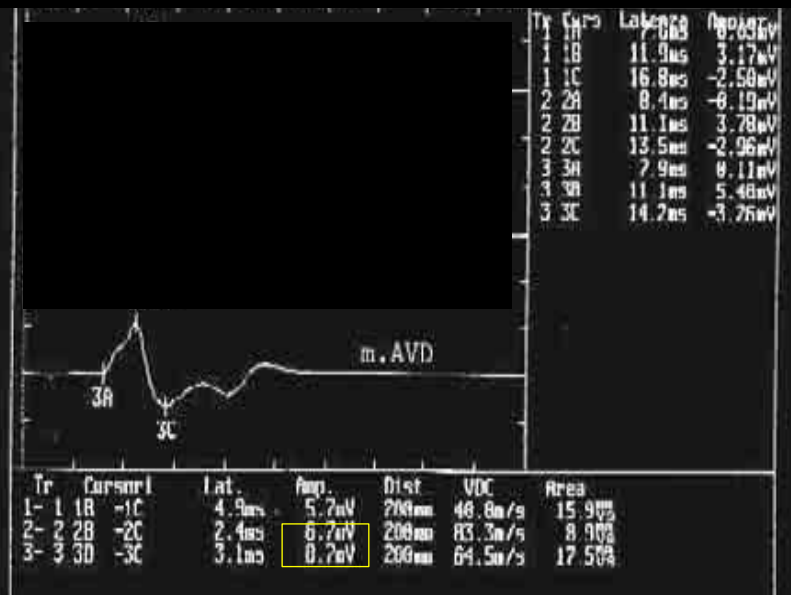




N. ULNARE

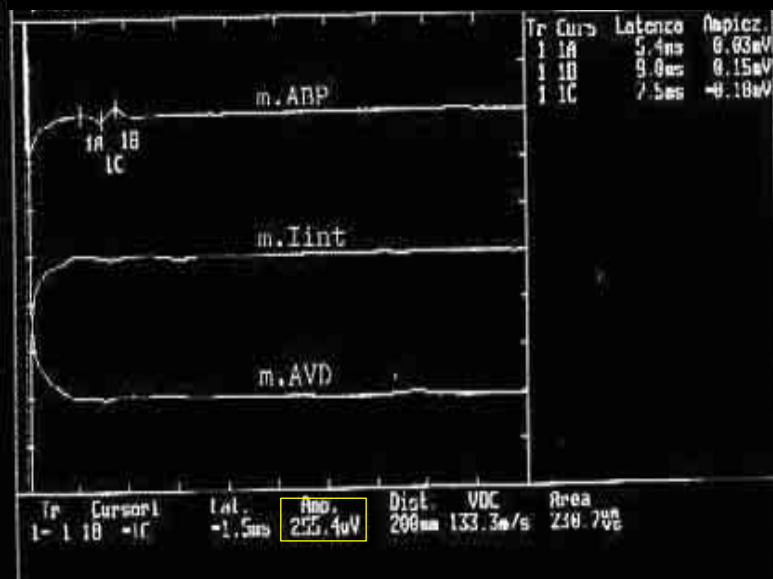
P O L S O

G O M I T O

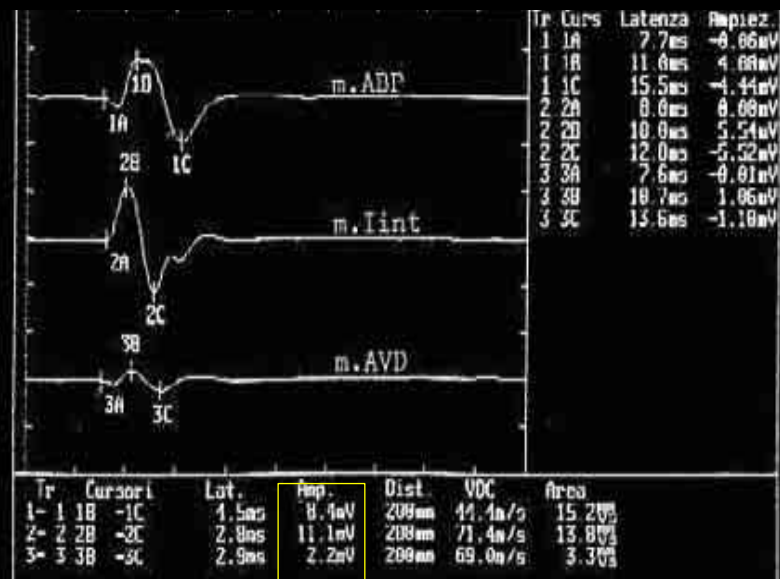


→ N. MEDIANO

POLSO



GOMITO





N. ULNARE

P O L S O

G O M I T O

