

# **REPORTING**

## ***How do we put all this together?***

*Stålberg*

## ***Reporting***

Summary of clinical situation

Results

- graphic reports
- tables
- signals
- brief summary of essential findings

Conclusion

- neurophysiological conclusion
- clinical interpretation



## ***Report (AANEM 2006)***

1. Clinical problems
2. NCS, specific details
3. EMG, specific details
4. Summary Section: summarize NCS and EMG - integrate
5. Diagnostic interpretation Section
6. Option: clinical diagnosis, differential diagnostic alternative

*AANEM 2006*

## ***1. Pat data and Clinical problem***

- Demographic data
- Reason for referral, symptoms, signs, possible diagnosis

*AANEM 2006*

## ***2. NCS***

- Methods, anti/ortho-dromic, ampl methods
- SCS sites, segments, ampl, CV,
- MCS sites, segments, data
- F-waves nerve, #, latency
- H refl nerve, physiological state, ampl ratio
- RNS nerve, phys state, Hz, ampl, decr, facilitation

*AANEM 2006*

## ***3. EMG***

- Optimal # muscles
- describe spont activity, MUP shape, IP in tabular for
- report limitations (pain, ..)

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## 4. Summary

- Summarize NCS in tabular form with deviations from normal indicated
- Summarize EMG in tabular form with deviations from normal indicated

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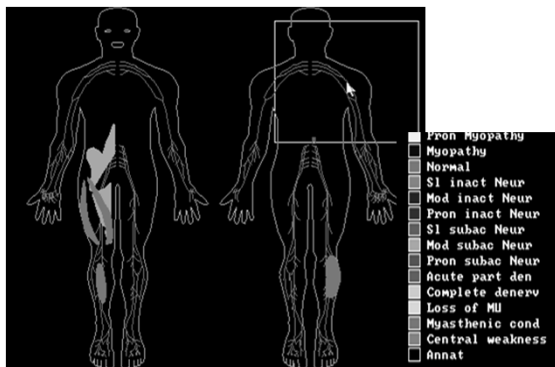
## Neurography report - concise

MOTOR NERVE:	dLat	dAmp	CV	Amp%	F-M
Medianus Wrist - Ab Elb	■ +	■ +■	■ +■	■ +■	■ +■
Ulnaris Wrist - Ab Elb	+	+	+	+	+
Tibialis Ankle - Knee	■ +■	■ +■	■ +■	■ +■	■ +■
Peroneus Ankle - Be knee	■ +■	■ +■	■ +■	■ +■	■ +■
SENS. NERVE :	Lat	Amp	CV	Amp%	
Medianus Palm - Wrist Dig III - Wrist Dig I - Wrist	■ + ■ + ■ +				
Ulnaris Palm - Wrist Dig V - Wrist	+				
Suralis Ankle - Foreleg	+				

■ normal area  
■ normal  
■ 100% normal

SD : -2 +2 +6 -6 -2 +2 -6 -2 +2 -6 -2 +2

## Graphic reporting of EMG findings



## Summary of findings

- report only relevant findings on which you base your conclusion
- use simple terminology that your colleagues understand
- words like “fibrillation potentials” or “polyphasic MUPs” must be avoided
- sometimes it important to underline that some findings are normal



## Conclusion

- When in doubt, say SO
- or
- When in doubt, say NO

## Neurophysiological conclusion

- localization
- severity
- pathophysiology
- time course
- distribution



## ***5. Diagnostic Interpretation***

- Describe if the study over all is abnormal, and why
- provide electrophysiological diagnosis, and level
- describe limitations that make the study incomplete
- compare to earlier tests

*AANEM 2006*

## ***EDX Report***

- Interpretation
  - Electrodiagnostic interpretation
    - ☞ Positive statements (not list of negatives)
  - Clinical interpretation
    - ☞ Reasonable in the clinical context (not exhaustive list of remote possibilities)

## ***Examples of neurophysiological conclusion***

- moderate subacute axonal sensory and motor polyneuropathy
- slight conduction block of the ulnar nerve in the cubital tunnel
- severe axonal lesion of the suprascapular nerve in incisura scapulae

## ***Clinical interpretation***

- “beware of weak ice”
- suite the clinical conclusion to you clinical experience
- be clear
- provide differential diagnosis if indicated
- recommend a control EMG only if there is a specific reason for it

## ***Example of a report summary***

***EMG:*** There are slight subacute neurogenic findings in the first dorsal interosseus and flexor carpi ulnaris muscles.

***Nerve conduction studies:*** The motor conduction velocity of the ulnar nerve was slightly reduced in the retroepicondylar region at the elbow.

***Conclusion:*** The findings are compatible with a slight axonal and demyelinating ulnar nerve lesion in the retroepicondylar region at the elbow.

The symptoms have progressed slowly over a two years and the patient has clinically arthrosis of the elbow. This ulnar neuropathy is probably a so called “tardy ulnar palsy” (entrapment due to arthrosis of the elbow).

## ***Factors determining the usefulness of Neurophysiology***

- quality of examination
  - (technique, concept, interpretation)
  - (experience and training of staff)
- clinical material
- availability
- waiting list
- reporting
- patient acceptance
- cost / reimbursement

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