Compound Muscle Action Potential amplitude reproducibility as a function of site and size of the recording electrode.

Published: 10-06-2010
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To investigate the effects of three different methods of finding a suitable recording site for CMAP and three different electrode sizes on CMAP amplitude and its reproducibility

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Muscle disorders
Study type	Observational non invasive

Summary

ID

NL-OMON34506

Source
ToetsingOnline

Brief title
CMAP reproducibility as a function of site&size of the recording electrode

Condition

- Muscle disorders

Synonym
not applicable

Research involving
Human

Sponsors and support

Primary sponsor: Leids Universitair Medisch Centrum
Source(s) of monetary or material Support: Ministerie van economische zaken

Intervention

Keyword: CMAP, Reproducibility

Outcome measures

Primary outcome

CMAP parameters (latency, duration, amplitude and area of distally evoked CMAPs) as well as conduction parameters (motor nerve conduction velocity (MNCV), and the percentile changes of amplitude, duration and area over the length of nerve) described as means with standard deviation (SD), as well as with the coefficient of variation (CV).

Secondary outcome

not applicable

Study description

Background summary

Because of large interindividual variability and poor reproducibility, the Compound Muscle Action Potential (CMAP) as an estimate of the functional motor units has a relatively poor diagnostic validity. Improving reproducibility and reducing site-induced variability by defining the most optimal approach for measuring CMAP parameters will lead to improved accuracy and diagnostic yield of nerve conduction studies.

Study objective

To investigate the effects of three different methods of finding a suitable recording site for CMAP and three different electrode sizes on CMAP amplitude and its reproducibility

Study design

Repeated comparison of CMAP recording methods

Study burden and risks

Very little. Only 2 short-lasting visits. CMAP measurements could be a bit painful, but usually this is not the case.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

aged between 18 and 50

Exclusion criteria

evidence of diseases of or predisposing to peripheral nerve damage of the leg

Study design

Design

Study type: Observational non invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Other

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	18-08-2010
Enrollment:	15
Type:	Actual

Ethics review

Approved WMO

Date:	10-06-2010
Application type:	First submission
Review commission:	METC Leids Universitair Medisch Centrum (Leiden)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL32319.058.10