Quantitative sensory testing of pain hypersensitivity in chronic pain patients

Published: 15-08-2018
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The primary goal of this pilot is to study the chronic pain patient population with respect to the prevalence of central sensitization measured with eQST measurements.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Peripheral neuropathies
Study type	Observational non invasive

Summary

ID

NL-OMON46511

Source
ToetsingOnline

Brief title
QST study

Condition

- Peripheral neuropathies

Synonym
Central sensitization and pain hypersensitvity

Research involving
Human

Sponsors and support

Primary sponsor: Sint Antonius Ziekenhuis
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Chronic pain, Pain hypersensitivty, Quantitative sensory testing

Outcome measures

Primary outcome

Electrical Quantitative Sensory Testing (eQST): Electrical Pain Detection

Threshold (EPDT) [mA]

Secondary outcome

Subject characteristics (i.e age, gender, body mass index, employment status).

Study description

Background summary

Chronic pain is known to be a major influence in a patient*s life. Chronic pain can lead to pain hypersensitivity, however still little is known about the underlying mechanism and makes it difficult to determine an appropriate treatment. Quantitative sensory testing (QST) is a psychophysical method used to quantify somatosensory function and to test the integrity of the peripheral and central nervous system. Assessment of nociceptive thresholds (e.g., detection threshold or pain tolerance thresholds) using various modalities (e.g., electrical, thermal or mechanical) allows observation of sensory processing under normal and pathophysiological conditions. The aim of this pilot study is to get insight in the prevalence of pain hypersensitivity in pain patients compared to healthy subjects. We will examine the feasibility of this approach which is intended to be used in a larger scale study, focused on subject characteristics and the relation with sensitization phenomena.

Study objective

The primary goal of this pilot is to study the chronic pain patient population with respect to the prevalence of central sensitization measured with eQST measurements.

Study design

Single-centre, prospective, observational pilot study.

Study burden and risks

There are no risks associated with the study, given the non-invasive nature of

the measurements.

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

Patients:
Chronic pain (>3 months)
Lumbar spine related pain
Age: >18 years old;Controls:
Pain free
Age: >18 years old

Exclusion criteria

Pregnancy
Diabetes Mellitus
Alcohol or drug abuse
Implantable cardioverter defibrillator or pacemaker
Incapable of controlling device
Language barrier

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Diagnostic

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	28-09-2018
Enrollment:	200
Type:	Actual

Medical products/devices used

Generic name:	NociTRACK AmbuStim
Registration:	No

Ethics review

Approved WMO

Date:	15-08-2018

Application type:	First submission
Review commission:	MEC-U: Medical Research Ethics Committees United (Nieuwegein)

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	NL65160.100.18