Peripersonal space and chronic pain (PSCP)

Published: 10-04-2013
Last updated: 24-04-2024

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Ethical review	Not approved
Status	Will not start
Health condition type	Joint disorders
Study type	Observational non invasive

Summary

ID

NL-OMON38637

Source
ToetsingOnline

Brief title
Peripersonal space and chronic pain (PSCP)

Condition

- Joint disorders
- Peripheral neuropathies

Synonym
continuous suffering, Persevering pain

Research involving
Human

Sponsors and support

Primary sponsor: Universiteit Utrecht
Source(s) of monetary or material Support: NWO VICI beurs toegekend aan H.C. Dijkerman

Intervention

Keyword: attention, Chronic pain, classical conditioning, peripersonal space

Outcome measures

Primary outcome

Eye movement behaviour such as saccade accuracy and saccade latency (as a measure of attentional pulling capacity) towards or away from visual targets that have become associated with the pain stimulus are the primary outcome of our study.

Secondary outcome

We additionally test reaction time to these visual stimuli and the speed of learning (and unlearning) and investigate whether the attention and learning effects are related to personality and psychological characteristics of the tested population.

Study description

Background summary

Pain captures attention which allows us to learn which events are associated with pain. By learning we are able to predict painful consequences and execute appropriate defensive behavior. In some occasions, acute pain does not subside, even though the underlying physiological damage has been recovered. It has been suggested that such chronic pain is associated with a persistent negative prediction of the pain signal.

Study objective

As none of the proposed experimental conditions have been executed with chronic pain patients, our main objective is to determine the sensitivity of the experimental conditions. Besides, we investigate the attention-bias for pain signals that chronic pain patients (CPP) are suggested to have and its relation to the immediate space surrounding oneself (peripersonal space). Second, we

investigate whether the chronicity of pain is related to faster learning and slower *unlearning* of new associations between pain signals (small electrical current) and visual events, as compared to healthy control participants. Finally, we investigate whether the observed effects are related to personality and psychological characteristics of the investigated population.

Study design

The proposed study has a quasi-experimental design encompassing various within- and between-subjects factors that are investigated using a computerized visual search task, with three different experimental conditions. A classical conditioning paradigm is used to investigate learning principles and questionnaires are used to determine the personality and psychological characteristics of the study population.

Study burden and risks

Participants may experience negative emotions during the study, and the pain stimuli can be experienced as annoying, although the used methods are low on invasiveness. The knowledge gained with the present research has implications for improving treatment and/ or diagnostic approaches: the benefits clearly outweigh the costs.

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

All participants will be between 18 and 75 years of age, capable of speaking and reading Dutch, and have pain in either their back, or their hand, for more than three months or when the pain lasts longer than is expected on basis of the tissue damage. Control participants will be healthy and pain-free as determined by self-report.

Exclusion criteria

Participants will be excluded when they have a severe neurological or psychiatric condition, known cognitive disorders, a cardiac pacemakers, Diabetes, unless on a stable dose current use of sedative psychotropic drugs such as benzodiazepines, barbiturates, tricyclic antidepressants, anticonvulsants sedatives, and classical antihistaminics, acute or chronic pain in other areas than the target area (hand or back), bilateral hand pain, serious injury to both hands, or current participation in another research protocol.

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:	Basic science

Recruitment

NL

Recruitment status:	Will not start
Enrollment:	40
Type:	Anticipated

Ethics review

Not approved

Date:	10-04-2013
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)

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	NL44250.041.13