Onset, natural course and risk factors of temporomandibular joint internal derangements in children

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To investigate the onset and short term natural course of ADD and TMJ hypermobility in children, and to give insight into some related risk factors.

Ethical review	Approved WMO
Status	Pending
Health condition type	Joint disorders
Study type	Observational invasive

Summary

ID

NL-OMON30714

Source
ToetsingOnline

Brief title
TMJ internal derangements in children

Condition

- Joint disorders

Synonym
anterior disc dislocation, clicking joint, TMJ luxation

Research involving
Human

Sponsors and support

Primary sponsor: Academisch Centrum Tandheelkunde Amsterdam (ACTA)
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: anterior disc discplacement, mandibular movement recording, TMJ hypermobility

Outcome measures

Primary outcome

- The presence and absence of ID's

- natural course of ID's in time

- possible risk factors such as: gender, age, occlusion, orthodontic treatment,

parafunctional activities, trauma, bodily development.

Secondary outcome

See primary study parameters.

Study description

Background summary

Clicking of the temporomandibular joint (TMJ) is one of the typical clinical manifestations of internal derangements (IDs) of the TMJ. The two main types of IDs are disc displacements (mostly in anterior direction) and hypermobility. IDs are, in general, not a source of complaints, and are therefore not treated, except in cases when joint locking or pain occurs. A number of studies, focusing on TMJ clicking in general, have found an increasing prevalence in children and adolescents, but have also described clicking as intermittent and episodic. However, these studies did not make a distinction between the two forms of IDs. Therefore, the genesis and natural course of anterior disc displacement, and of TMJ hypermobility in children, is unknown. This is also true for the risk factors for development of IDs, as well as for the factors related to a possible discontinuation of ID's in time.

Study objective

To investigate the onset and short term natural course of ADD and TMJ hypermobility in children, and to give insight into some related risk factors.

Study design

A longitudinal observational cohort study.

Study burden and risks

This study is observational and carries no risk towards the participant's health. The minimal burden for the participants is paying several half-year visits, coupled with the regular dental check-ups at ACTA. At each visit the participants will be shortly examined clinically in relation to joint sounds, and a short questionnaire will be done. The participants with IDs will additionally undergo mandibular movement recordings.

By participating, the subjects benefit from the diagnostic procedures and explanation about the phenomenon *clicking joint*. In case joint locking or pain arises throughout the study, as part of the natural course of the condition, treatment will be initiated with priority. This research is regarded as group related, because an indication exists that the activity of ID-related factors in this age group is greatest.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adolescents (12-15 years)
Adolescents (16-17 years)

Inclusion criteria

Age between 12 and 16 years.

Exclusion criteria

Presence of psychosocial, dental or general health problems (see question D3).

Study design

Design

Study type: Observational invasive

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

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-11-2006
Enrollment:	200
Type:	Anticipated

Ethics review

Approved WMO

Application type:	First submission
Review commission:	METC Amsterdam UMC

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	NL14334.029.06