Investigation of the reliability of a manual test according the rotation of the knee

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Define the normal outcome and spread of the range of motion of the knee-rotationThe outcome of the manual rotationtest of the knee compared with a rotation-device. (reliability of the test)Define inter- and intra-tester reliability of the manual...

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

Summary

ID

NL-OMON44186

Source
ToetsingOnline

Brief title
Kneerotationtest 90 degree knee hip flection
Intra/intertesterreliability

Condition

- Joint disorders

Synonym
Unexplaned knee problems

Research involving
Human

Sponsors and support

Primary sponsor: Cheiron Medisch Centrum Waalre
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Knee, Manual test, Rotation

Outcome measures

Primary outcome

Part 1: Range of motion of the external- and internal rotation of the

knee.Outcome in degree of rotational motion.

ndfeel of the passive manual test normal/limited

Part 2: Passive motion of the external- and internal rotation of the knee using

a manual test and its "end-feel". The outcome will be normal or limited.

With the outcome we can calculate the intra- and interobserver reliability and

the Kappa

Part 3: Agreement between quantitative and qualitative . The quantitative

portion will be dichotomised to calculate Cohens'Kappa.

Sensitivity, specificity, AUC and ROC curve will be calculated to asses

diagnostic quality.

See protocol: Chapter statistical analysis

Secondary outcome

not applicable

Study description

Background summary

A limitation of external- and /or internal-rotation of the knee during physical examination of the musculoskeletal system can be a sign of disturbance of the

kinematic chain wich might cause secondary complaints.
Clinical observation in our daily practice shows restriction of rotation as probably caused by problems in the adjacent joints .
This might cause complaints of unknown origine.
Hypothesis: the manual rotationtest of the knee in a 90 degree angle is reliable.

Study objective

Define the normal outcome and spread of the range of motion of the knee-rotation
The outcome of the manual rotationtest of the knee compared with a rotation-device. (reliability of the test)
Define inter- and intra-tester reliability of the manual test

Part 1: First objective is to criticize if the clinical rotation-test with the knee in 90 degree flexion (and the hipjoint in 90 degree flexion) is reliable.
In this first part a quantitative measurement is done with support of a rotational device to objectivate the range of motion in degrees of external- and internal rotation of the knee. Define the normal outcome and the distribution of the knee rotation.
Part 2: To study the intra- and interobserver agreement of the clinical test.
To study this item 40 subjects (20 normal and 20 limited knee rotational movement) will be included.
Part 3: The agreement between quantitative and qualitative measurement as calculated in part 1 and 2 will be elaborated

See protocol : introduction and objectives

Study design

part1: analytical experimental descriptive study;
part 2 +3:analytical experimental study

Study burden and risks

non applicable

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

Part 1
Age 18 to 55 yrs
No complaints concerning musculoskeletal system
Voluntary participation and confirmed informed consent
Dutchspeaking
Part 2 and 3
People with or without limitation of the kneerotation
Voluntary participation and confirmed informed consent
Dutch speaking

Exclusion criteria

Knee-surgery in the medical history
Hip-, ankleor footsurgery in the medical history
Bone-fracture of the lower extremity in the medical history
Congenital abnormalities of the lower extremity
Systemic inflammatory diseases
Muscle disease
Radiculopathy

A limitation of the kneerotation having a probable connexion with a certain presentation of physical problems

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):	07-12-2017
Enrollment:	160
Type:	Actual

Ethics review

Approved WMO

Date:	24-07-2017
Application type:	First submission
Review commission:	METC Maxima Medisch Centrum (Veldhoven)

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	NL62076.015.17