

Tibial Rotation and Anterior Cruciate Ligament Deficiency

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There is a difference in the range of tibial rotation between ACL ruptured knees and ACL intact knees.

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON27287

Bron

Nationaal Trial Register

Verkorte titel

TRACe

Aandoening

ACL deficiency

Ondersteuning

Primaire sponsor: UMCG

Overige ondersteuning: UMCG

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Range of tibial rotation

Toelichting onderzoek

Achtergrond van het onderzoek

Rupture of the Anterior Cruciate Ligament (ACL) is a common injury leading to increasing numbers of ACL reconstruction (ACLR) around the world. Return to play (RTP) is becoming a more and more important outcome measure after ACLR. Recent reviews have shown that a mere 55% of patients after ACLR can return to their pre-injury level of sports. It is hypothesized that ACLR is incapable of reducing excessive tibial rotation, which leads to poor outcomes in respect of RTP.

Objective: The main study objective will be to determine whether there is an excessive tibial rotation in ACL deficiency and how this develops over time.

As instability mostly occurs during sports, it is essential to test subjects in these circumstances. In order to test in high-demanding activities, several tests have been developed such as the one-legged forward hop test and the side step. These tests have been validated in healthy subjects using a skin-marker based Motion Capture System (VICON). With VICON, movement of the tibia in relation to the femur can be objectified in a three-dimensional matter. VICON uses 8 infrared cameras to detect reflective markers in an area. These markers can be attached to bony landmarks. In this manner VICON can analyse movement of the tibia relative to the femur.

Doel van het onderzoek

There is a difference in the range of tibial rotation between ACL ruptured knees and ACL intact knees.

Onderzoeksopzet

within 3 months after ACL rupture
+ 1 year

Onderzoeksproduct en/of interventie

none

Contactpersonen

Publiek

UMCG

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Wetenschappelijk

UMCG

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

18-35 years

ACL rupture, based on physical examination

Less than 3 months after injury at time of diagnosis

At least six weeks to three months of conservative therapy

Intact contralateral knee on physical examination

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Patients with any history of fractures in the lower extremities or spine

Previous osteotomy in the lower extremities

Previous ligament reconstruction surgery in the lower extremities

Neurological conditions leading to musculoskeletal disorders

Any other musculoskeletal pathology of the lower limbs (i.e. concomitant ligament injuries or posterolateral corner injuries)

Inability to complete Dutch questionnaires

Onderzoeksopzet

Opzet

Type:

Observationeel onderzoek, zonder invasieve metingen

Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	01-08-2016
Aantal proefpersonen:	15
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies	
Datum:	16-04-2019
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL7686

Register

Ander register

ID

METC UMCG : METC2015/524

Resultaten