

The use of an activity coach in patients after a TKA following a homebased exercise program

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To determine the additive effect of an activity coach added to a home based exercise program after a TKA on 1) activity level 2) recovery of physical functioning.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON41807

Source

ToetsingOnline

Brief title

activity coach in TKA following a homebased exercise program

Condition

- Other condition

Synonym

knee replacement, Total Knee Arthroplasty

Health condition

orthopedische aandoeningen

Research involving

Human

Sponsors and support

Primary sponsor: Medisch Spectrum Twente

Source(s) of monetary or material Support: Onderzoeksmetingen wordt uitgevoerd door promovendus Karen Harmelink. Onderzoeksuren worden door FysioGym Twente gefinancierd en de vakgroep orthopedie in het MST

Intervention

Keyword: homebased exercise program, telemedicine, Total Knee Arthroplasty

Outcome measures

Primary outcome

physical functioning TUG

Secondary outcome

physical functioning: 2 MWT

activity level: activity diary and 3D accelerometer

activity and participation level: KOOS

health care consumption in relation to TKA till 1 year postoperative

Study description

Background summary

Patients in which the expectancy is that they could rapidly recover after a Total Knee Arthroplasty should not always go to the physical therapist. This group of patients could benefit from a homebased exercise program. The effect of exercise training depends on adherence to the activity instructions. The activity coach is an app on a smartphone. Patients wear the smartphone the whole day with them. The activity coach measures the activity level of the patient and gives feedback on it to the patient. The hypothesis is that if patients receive an activity coach alongside a home based exercise program, they are more active in Activities of Daily Living. This results in better physical functioning and better recovery after a TKA.

Study objective

To determine the additive effect of an activity coach added to a home based exercise program after a TKA on

- 1) activity level
- 2) recovery of physical functioning.

Study design

Randomised Controlled Trial

Intervention

Control group: homebased exercise program of 2 weeks (mobility, muscle force) instructed by specialised physical therapists.

Intervention group: homebased exercise program of 2 weeks (mobility, muscle force) instructed by specialised physical therapists and use of the activity coach.

The activity coach is developed by the Roessingh Research & Development (RRD) and is researched on other patient populations, such as COPD and Total Hip Arthroplasty. It gives the patient feedback about his activity level and doing exercises.

de patiënt feedback over zijn activiteitsniveau en het uitvoeren van oefeningen.

Study burden and risks

The load for the patient is very low, 6 measures of maximum 30 minutes

There are no risks in this study.

Contacts

Public

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

- receive a TKA
- Preoperative 2 Minutes Walk Test > 120 metre
- BMI < 30
- Absence of bad habit, Gang Analyse Lijst Nijmegen the following items *no*
 - o Too little arm sway
 - o Too little knee extension
 - o Too little knee flexion
- Active coping, measured with the Patiënt Activatie Meting (PAM) > 60 points
- signed informed consent
- independent in activities of daily living
- supplementary insurance for physical therapy or declare oneself ready to pay 180 euro for physical therapy

Exclusion criteria

- Comorbidities (such as heart or lung diseases, orthopaedic problems, cancer, etc) so that the patient could not follow a homebased exercise program and/or could not walk dynamic
- Postoperative complications, open wounds, infections, > 3 days staying in the hospital.
- known with severe mental disorders

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Active
Primary purpose:	Treatment

Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	25-09-2015
Enrollment:	110
Type:	Actual

Ethics review

Approved WMO	
Date:	28-05-2015
Application type:	First submission
Review commission:	METC Twente (Enschede)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

ID: 26247
Source: NTR
Title:

In other registers

Register	ID
Other	Nederlands Trialregister, nummer nog niet binnen
CCMO	NL52370.044.15
OMON	NL-OMON26247