Pilot study into the development of an effective home-based-exercise-strategy for patients after THA delvered on a Tablet-PC.

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

Summary

ID

NL-OMON44232

Source
ToetsingOnline

Brief title
Development of an effective home-based-exercise-strategy for THA patients

Condition

- Joint disorders

Synonym
new hip, total hip arthroplasty

Research involving
Human

Sponsors and support

Primary sponsor: Orthopedie

Source(s) of monetary or material Support: Anna Fonds

Intervention

Keyword: exercise, orthopedics, physiotherapy, total hip arthroplasty

Outcome measures

Primary outcome

Practical feasibility is measured by a questionnaire and interview with

patients and their exercise compliance.

Secondary outcome

Clinical effectiveness is determined by objective measurements of mobility by

means of motion sensors and self-reported questionnaires (HOOS, SF-36 and

EQ5D).

Study description

Background summary

Osteoarthritis is one of the most common chronic diseases of the musculoskeletal system in elderly. Patients with osteoarthritis experience pain, stiffness and loss of mobility. As a result of the ageing in the coming decades the number of elderly with osteoarthritis will progressively increase. Osteoarthritis is a common indicator for a Total Hip Arthroplasty (THA). A hip replacement is one of the most successful orthopedic surgeries. However, with regard to the postoperative rehabilitation a lot can be improved. The current situation after a THA is that physical therapy is not prescribed by default. Patients are resigned from the hospital and receive home exercises. However, it is not clear whether patients actually carry out these exercises and whether they perform the exercises correctly.

Study objective

The main objective of this pilot study is the application of a home-based exercise strategy that helps patients to return faster to their functional level of before the surgery. At first, practical feasibilty of the exercise strategy delivered by means of videos on a tablet-pc will be investigated and

secondary the potential clinical effectiveness. For the determination of clinical effectiveness, newly developed possibilities of motion sensors will be used to evaluate mobility.

Study design

The pilot study is an intervention study with four measurements.

Intervention

A twelve-week home-based exercise strategy will be offered to patients after their discharge from the hospital. This home-based exercise strategy will be delivered by means of videos on a tablet-pc and consist of specified exercise instructions for improving muscle strength, balance and functional movements.

Study burden and risks

The exercises consist of the usual exercises that are provided after a THA and therefore there is no additional risk for participants. There is also no risk in wearing of the motion sensor in the home situation and test situations. The sensor is small and light and can be worn as a necklace without constrictions. The objective measurements of mobility consist of activities of daily living and in that sense there is again no additional risk for participants. In addition we focus on relatively young patients between 18 and 75 years of age. Participants will be measured four times; before the surgery, during the beginning and at the end of the twelve-week intervention and a follow-up six months after the operation. During these measurements participants fill in a questionnaire and perform some activities of daily living (e.g. standing, sitting, walking) while they are wearing a motion sensor. In addition, a participant will perform a twelve week home-based exercise strategy in order to train muscle strength, balance and functional movements. The exercises will take about 30 minutes a day. Furthermore, once a week there is a telephone call with a physiotherapist/researcher.

Contacts

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Selecteer

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

age between 18 and 75 years
living independent
waiting for a total hip arthroplasty at Martini Hospital

Exclusion criteria

a revision operation
severe comorbidity that influence mobility
cognitive disabilities
not able to understand the Dutch exercise instructions
participating in another rehabilitation program

Study design

Design

Study type:	Interventional
Intervention model:	Other

Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-04-2016
Enrollment:	30
Type:	Actual

Ethics review

Approved WMO Date:	27-11-2014
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)
Approved WMO Date:	24-06-2015
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)
Approved WMO Date:	12-11-2015
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)
Approved WMO Date:	01-02-2016
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)

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	NL50372.042.14