

What is the effect on independent recovery of using pedometers as a tool to prescribe exercise following total hip replacement?

Submission date 20/10/2014	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 25/02/2015	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 10/05/2021	Condition category Surgery	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Pedometers are portable devices, often attached by a belt worn on the waist. That counts every step a person takes by detecting hip movements. There is evidence to suggest that these devices promote physical activity and improve quality of life in the general population. It is also suggested that people generally don't increase their physical activity levels after undergoing hip replacement surgery. Here, we hope to use the pedometer to increase levels of physical activity in this group of patients and help them to recover from their surgery.

Who can participate?

Adults (at least 18 years old) who have a hip replacement operation scheduled for 2 weeks' time or later and are able to walk at least 10m without walking aids.

What does the study involve?

The participants are randomly allocated into one of two groups. Those in group 1 receive standard care following their surgery. Those in group 2 receive standard care and a pedometer-driven walking intervention (treatment). Each person in this group will be given a target number of steps to walk each week using their pedometer.

What are the possible benefits and risks of participating?

The possible benefits of taking part in the study are that it is helping to understand if physical activity aids recovery following hip replacement. The additional risks on taking part in this study is that there is a slight increase in the risk of suffering a 'sports injury' as it is likely that participation in this study will result in participants being more physically active than usual.

Where is the study run from?

University of East Anglia (UK)

When is the study starting and how long is it expected to run for?

November 2014 to September 2016

Who is funding the study?
University of East Anglia (UK)

Who is the main contact?
Mr Tom Withers
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
1

Study information

Scientific Title
What is the effect on independent recovery of using pedometers as a tool to prescribe exercise following total hip replacement? A two arm randomised controlled trial

Acronym
HPA

Study objectives
1. Prescribed PA will significantly increase the overall amount of PA undertaken.
2. Prescribed PA will significantly improve quality of life.

Ethics approval required
Old ethics approval format

Ethics approval(s)

Cambridge south ethics committee, 20/10/2014, ref. 14/EE/1178

Study design

Two arm randomised controlled trial.

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Total hip arthroplasty.

Interventions

Participants are randomly allocated into one of two groups.

Group 1: Receive standard care

Group 2: Receive standard care and walking based pedometer intervention

Intervention Type

Device

Phase

Not Applicable

Primary outcome(s)

Oxford Hip Score

Measured pre-surgery and 4, 12 and 24 weeks post surgery.

Key secondary outcome(s)

1. Hip dislocation
2. Quality of life measured by self-completed questionnaire
3. Physical activity level through accelerometry.

Measured pre-surgery and 4, 12 and 24 weeks post surgery.

Completion date

30/09/2016

Eligibility

Key inclusion criteria

1. Patient is on the waiting list for primary elective unilateral THR
2. Patient is 18 years of age or older
3. Patient is able to walk at least 10m pre-operation without walking aids, if the patient is unable to walk pre-operation it is believed that the patient will be able to walk post-THR
4. Patients operation is scheduled to be at least 2 weeks away

5. Patients have no other prosthetic implants

6. The surgeon that is performing the operation performs operations in both the independent and NHS hospital

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

1. Patient is unable to give informed consent
2. Patient is having two different procedures combined together in one operation
3. Patients cannot comprehend English and do not have a friend, relative or care giver who is willing to translate for them
4. Patient is currently undertaking a custodial sentence
5. Patient already has a prosthetic hip in the other femur or patient is undergoing replacement of a previously implanted prosthetic hip
6. If the participants suffer an operative or perioperative complication they will be excluded from the study at this stage
7. Participants who suffer from any absolute or relative contraindication to exercise
8. For this study partial proximal femur resection (PFR) will not be considered a form of THR
9. Patient lives in a care home
10. A reason for the patients to undergo THR is due to a form of cancer

Date of first enrolment

05/12/2014

Date of final enrolment

31/03/2016

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

University of East Anglia
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School of Health Sciences
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Sponsor information

Organisation

University of East Anglia

ROR

<https://ror.org/026k5mg93>

Funder(s)

Funder type

Research council

Funder Name

University of East Anglia

Alternative Name(s)

UEA University of East Anglia, UEA

Funding Body Type

Private sector organisation

Funding Body Subtype

Universities (academic only)

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023	No	No