# Hernia active living trial: HALT

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
11/07/2019		[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
20/02/2020	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
04/07/2023	Digestive System			

#### Plain English summary of protocol

Background and study aims

A stoma is an opening on the abdomen that can be connected to either your digestive or urinary system to allow waste (urine or faeces) to be diverted out of your body. People living with a stoma can go on to develop a bulge or hernia at the site of the surgery. Reported rates of these parastomal hernias are as high as 40% 2 years after surgery. Attempts to repair the hernia using surgery have been disappointing with hernia recurrence in 30-76% of patients. Other types of intervention are needed to manage the symptoms, and quality of life issues that come with having a parasttomal hernia.

This is a feasibility trial so we will not be focusing on outcomes. The trial will recruit enough patients to gain knowledge of the number of patients who complete the intervention, and how patients feel about the intervention. We will also be looking at the following measures: the size of the bulge/hernia; abdominal composition (e.g muscle, fat ratios); quality of life; body image; physical activity levels; and Body Mass Index (which is a risk factor for parastomal hernia). Any changes in these measures will be reported, but they will not be classed as significant until a larger trial is undertaken.

#### Who can participate?

Patients who have a stoma and have been diagnosed with a parastomal hernia.

#### What does the study involve?

This intervention aims to provide a theoretically based physical activity intervention to improve core control, and strengthen the abdominal wall at a site of potential weakness. The hypothesis is that this intervention will reduce the risk of the hernia/bulge progressing, and that there will be an improvement in the appearance of the hernia, and have an effect of patient quality of life and body image.

## What are the possible benefits and risks of participating?

This is a low risk study of a physical activity intervention as the main component. We do not anticipate any safety issues while carrying out the study. The intervention will concentrate on core training which involves small movements which will be described in detail and closely monitored by a clinical exercise specialist. There is a small risk of post-exercise soreness when learning new movements and activities. This is normal, and will subside within 24-48 hours. Patients will be made aware that they may experience some muscle soreness when first trying the exercises.

The exercises involved all have 4 levels of progression/difficulty and will be prescribed based on individual circumstances and abilities.

The exercises have been chosen based on guidelines issued by the American College of Sports Medicine (ACSM) in 2019 for patients living with an ostomy (stoma). They have also been informed by the Australian Physiotherapy and Pilates Institute (APPI) and have been discussed with our patient advisory group for appropriateness.

Where is the study run from? University of the Highlands and Islands, UK.

When is the study starting and how long is it expected to run for? March 2020 to June 2021

Who is funding the study?

Bowel Disease Research Foundation (via funding from Ileostomy and Internal Pouch Association and The Kingston Trust) (UK)

Who is the main contact? Prof. Gill Hubbard gill.hubbard@uhi.ac.uk

# Contact information

## Type(s)

Public

#### Contact name

Prof Gill Hubbard

#### **ORCID ID**

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# Additional identifiers

#### **EudraCT/CTIS** number

Nil known

#### **IRAS** number

269384

#### ClinicalTrials.gov number

## Secondary identifying numbers

1576GH, IRAS 269384

# Study information

#### Scientific Title

A feasibility study of a physical activity intervention to improve quality of life in people with a bulge/parastomal hernia.

#### Acronym

**HALT** 

#### Study objectives

To assess the feasibility of a physical activity intervention in people living with a stoma who have a bulge or parastomal hernia. We will evaluate the feasibility and acceptability of the key trial parameters. The main outcome is the decision by an independent Study Steering Committee whether to proceed to a full randomised controlled trial of the intervention. The hypothesis for a full RCT is that the intervention will improve core control and activation for patients with an area of potential weakness on the abdominal wall, thus reducing the risk of hernia progression. Increases in physical activity will improve hernia/ bulge appearance, and body image, thereby overall quality of life.

## Ethics approval required

Old ethics approval format

# Ethics approval(s)

Approved 06/02/2020, North of Scotland Research Ethics Committee 1 (Summerfield House, 2 Eday Road, Aberdeen, AB15 6RE, UK; +44 (0)1224 558458; nosres@nhs.net), ref: 20/NS/0007

# Study design

Feasibility randomised controlled trial

# Primary study design

Interventional

# Secondary study design

Randomised feasibility study

# Study setting(s)

Other

# Study type(s)

Quality of life

# Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

#### Health condition(s) or problem(s) studied

Stoma, parastomal hernia

#### **Interventions**

A theoretically informed 12 week physical activity intervention with a clinical exercise specialist. Control group will receive usual care.

Intervention Group - The intervention will involve participants having 12 (1 per week) consultations with an exercise instructor. Professional associations for exercise specialists, such as the UK Chartered Institute for the Management of Sport and Physical Activity acknowledge that pre-exercise screening is an important part of the duties of an exercise specialist. Hence, the instructor will use the Physical Activity Readiness Questionnaire (PARQ) long version so that she can prescribe an individualised exercise programme for each participant, taking account of medical history and current health status. Participants will be prescribed 4 different types core training exercises with 4 levels of progression. These exercises are based pm the Australian Physiotherapy and Pilates Institute methods programme. Over the 12 week programme, there will be gradual progression in the prescribed frequency (number of times to perform the exercises that week), intensity (rate of exertion to perform the exercise that week) and duration (minutes to perform these exercises). The exercises will conform with the new guidelines issued by American College of Sports Medicine for people with an ostomy appliance.

Participants will receive a weekly physical activity consultation from an exercise instructor inperson, telephone and by video conferencing.

The intervention is of 12 weeks duration. Each participant will receive a weekly consultation. The duration of each weekly consultation is likely to vary; based on our previous study the average range is likely to be 15 - 45 mins (min 5;max 120; median 35).

Control Group – Will receive usual care and signposted to information about physical activity guidance provided by relevant UK charities including Ileostomy and Pouch Association, and Colostomy UK. Control group participants will undergo the same baseline and follow up measures as the intervention group.

### Intervention Type

Other

#### Primary outcome measure

Decision to proceed with a full-scale RCT of the intervention. An independent steering group committee will recommend whether the findings support the progression on to a fully powered trial.

#### Secondary outcome measures

At baseline (T0) and post-intervention 12weeks (T1):

- 1. Diagnosis and classification of PSH measured using clinical examination
- 2. Muscle activation measured using electromyography (EMG)
- 3. Body composition:
- 3.1. Waist circumference (cm)
- 3.2. BMI (kg/m²) measured using TANITA scales (weight) and Stadiometer (height)
- 4. Patient reported outcomes:
- 4.1. QoL measured using Stoma-QoL and EQ-5D
- 4.2. Body image measured using the body image scale
- 4.3. Physical functioning measured using the patient specific function scale

- 5. Physical Activity measured using the Actigraph GT3X+ accelerometer
- 6. Psychological determinants of physical activity measured using:
- 6.1. Basic psychological needs in exercise scale
- 6.2. Exercise self-efficacy questionnaire

# Overall study start date

01/09/2019

### Completion date

30/06/2021

# **Eligibility**

#### Key inclusion criteria

- 1. Stoma and diagnosed with a parastomal hernia, or has a bulge at the stoma site
- 2. >12 weeks post surgery

#### Participant type(s)

**Patient** 

#### Age group

Adult

#### Sex

Both

# Target number of participants

20

#### Key exclusion criteria

- 1. Previous parastomal hernia repair
- 2. Urostomy

#### Date of first enrolment

01/03/2020

#### Date of final enrolment

30/11/2020

# Locations

#### Countries of recruitment

England

Scotland

**United Kingdom** 

# Study participating centre NHS Highland

Raigmore Hospital Inverness United Kingdom IV2 3UJ

# Study participating centre Leeds Teaching Hospitals NHS Trust

Beckett Street Leeds United Kingdom LS9 7TF

# Sponsor information

#### Organisation

University of the Highlands and Islands

# Sponsor details

Executive Office Ness Walk Inverness Scotland United Kingdom IV3 5SQ +44 (0)1463 279000 ro@uhi.ac.uk

#### Sponsor type

University/education

#### Website

https://www.uhi.ac.uk/en/

#### **ROR**

https://ror.org/02s08xt61

# Funder(s)

# Funder type

Charity

#### **Funder Name**

Bowel Disease Research Foundation

#### Alternative Name(s)

**BDRF** 

#### **Funding Body Type**

Private sector organisation

#### **Funding Body Subtype**

Trusts, charities, foundations (both public and private)

#### Location

**United Kingdom** 

# **Results and Publications**

## Publication and dissemination plan

The protocol for this trial will be submitted for open publication as encouraged by the health research authority (HRA).

Future analysis and results will be prepared into manuscripts, which will be submitted to appropriate peer-reviewed journals.

# Intention to publish date

01/05/2022

# Individual participant data (IPD) sharing plan

All data generated or analysed during this study will be included in the subsequent results publication.

# IPD sharing plan summary

Other

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol article</u>	protocol	24/09/2020	30/09/2020	Yes	No
HRA research summary			28/06/2023	No	No
Results article		03/07/2023	04/07/2023	Yes	No