

Hernia active living trial: HALT

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

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 parastomal 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

<https://orcid.org/0000-0003-2165-5770>

Contact details

Dept. of Nursing and Midwifery, University of the Highlands and Islands, Centre for Health Science, Old Perth Road

Inverness

United Kingdom

IV2 3JH

+44 (0)1463 279815

gill.hubbard@uhi.ac.uk

Additional identifiers

Integrated Research Application System (IRAS)

269384

Protocol serial number

1576GH

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

Primary study design

Interventional

Study design

Feasibility randomised controlled trial

Study type(s)

Quality of life

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 in-person, 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(s)

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.

Key secondary outcome(s)

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

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

Healthy volunteers allowed

No

Age group

Adult

Sex

All

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**

United Kingdom

England

Scotland

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

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

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?
Results article	protocol	03/07/2023	04/07/2023	Yes	No
Protocol article		24/09/2020	30/09/2020	Yes	No
HRA research summary			28/06/2023	No	No