Reinforcement of closure of stoma site using a biological mesh – extended follow-up

Submission date 28/04/2022	Recruitment status No longer recruiting	 Prospectively registered [X] Protocol
Registration date 10/05/2022	Overall study status Completed	 [] Statistical analysis plan [X] Results
Last Edited 12/08/2024	Condition category Surgery	Individual participant data

Plain English summary of protocol

Background and study aims

An incisional hernia forms when a surgical wound fails to heal and a defect remains in the muscle wall. Closure of a stoma wound (stomas are formed when the bowel is brought to the tummy skin) is a frequent cause of incisional hernia, occurring in over 1,000 UK patients every year. Surgical repair of these hernias is hazardous and up to 1 in 2 repairs will fail. These patients can be elderly with multiple medical problems, so further attempts at repair may be too risky, meaning they must tolerate the symptoms of pain, swelling and discomfort and live with the risk of life-threatening complications. A treatment that reduces the occurrence of hernias after stoma closure would improve patients' quality of life, reduce surgical complications and remove the need for further operations. The ROCSS study sought to address this problem by the use of a mesh to support the wound while it heals. Meshes are widely used in hernia repair to support the muscles while they heal. However, the mesh increases the problems of infection when the wound is contaminated by bacteria (as is the case in stoma closure). In ROCSS a type of 'biological' mesh made from animal tissue which is incorporated into the body tissues was used. Animal and human studies indicate that long-term infection problems are, as a consequence, reduced. ROCSS showed ROCSS was that fewer patients in the mesh group had a detectable hernia after 2 years – nearly half the number of participants compared to those who did not get a mesh.

The ROCSS study was trying to find out if the mesh works or not at reducing the development of hernias. We believe that more people will form hernias over time, and these may require treatment and impact of peoples' quality of life. We aim to investigate this in the ROCSS-EX study.

Who can participate?

Patients who took part in the original ROCSS study in the UK who successfully has their stoma reversed.

What does the study involve?

ROCSS-EX does not involve any additional treatment, tests or hospital visits. The extend followup involves a one-off telephone consultation to ask questions about quality of life the reversal operation and any symptoms related to the abdominal wall. It will also involve a review of health records to assess if any additional treatments may have been required in relation to the closed stoma site, reducing the number of questions asked during the telephone consultation.

What are the possible benefits and risks of participating? There are no risks associated with taking part as this study involves only a telephone consultation.

Where is the study run from? University of Birmingham (UK)

When is the study starting and how long is it expected to run for? November 2020 to August 2022

Who is funding the study? National Institute for Health and Care Research (NIHR) Research for Patient Benefit (RfPB) (NIHR212020) (UK).

Who is the main contact? Ruth Evans, Trial Manager, rocss@trials.bham.ac.uk

Study website https://www.birmingham.ac.uk/ROCSS-EX

Contact information

Type(s) Public

Contact name Mr James Brown

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Type(s) Scientific

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Additional identifiers

EudraCT/CTIS number Nil known

IRAS number 077075

ClinicalTrials.gov number Nil known

Secondary identifying numbers CPMS 49449, NIHR202011, IRAS 077075

Study information

Scientific Title Extended follow-up of the ROCSS trial

Acronym ROCSS-EX

Study objectives

Is there a significant improvement in long-term quality of life for patients that have a biological mesh reinforcement of the abdominal wall at the time of closure of stoma site, and is the intervention cost-effective? An extended follow up of the ROCSS study (https://www.isrctn.com/ISRCTN46330337)

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 07/01/2021, West Midlands - Coventry & Warwickshire Research Ethics Committee (The Old Chapel, Royal Standard Place, Nottingham, NG1 6FS, UK; +44 207 104 8009; coventryandwarwick.rec@hra.nhs.uk), ref: 12/WM/0187

Study design

Observational cohort study

Primary study design Observational

Observational

Secondary study design Cohort study

Study setting(s) Not specified

Study type(s) Treatment

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Incisional hernia

Interventions

There is no intervention if ROCSS-EX as such as it extended follow-up – the intervention under investigation remains the same one as in the original ROCSS trial (Reinforcement of the stoma closure site using the Strattice® collagen mesh). (https://www.isrctn.com/ISRCTN46330337)

Intervention Type

Other

Primary outcome measure

Quality of life at 5 to 8 years following closure of stoma site comparing participants who had mesh reinforcement of their abdominal wall with participants that had a standard closure. This will be assessed using the HerQLes tool

Secondary outcome measures

At 5-8 years follow-up:

- 1. Participant reported incisional hernia rate
- 2. Number of hospital visits for any hernia related reason
- 3. Number of interventional procedures related to the stoma closure site or hernia
- 4. Longitudinal QoL assessed using EQ-5D
- 5. Cost analysis for all additional hernia related events

Overall study start date

01/11/2020

Completion date 31/08/2022

Eligibility

Key inclusion criteria

All participants included in the ROCSS trial are eligible to be included in ROCSS-EX unless they withdrew or did not have their stoma reversed during the duration of the original trial. those participants who have died, only routinely collected data will be used.

Participant type(s) Patient

Age group Adult

Sex Both

Target number of participants Planned Sample Size: 702; UK Sample Size: 702

Total final enrolment 406

Key exclusion criteria Does not meet inclusion criteria

Date of first enrolment 01/02/2021

Date of final enrolment 31/05/2021

Locations

Countries of recruitment England

Scotland

United Kingdom

Study participating centre Heartlands Hospital Bordesley Green East Bordesley Green Birmingham United Kingdom B9 5SS

Study participating centre

Bristol Royal Infirmary

Marlborough Street Bristol United Kingdom BS2 8HW

Study participating centre Broomfield Hospital Court Road Broomfield

Chelmsford United Kingdom CM1 7ET

Study participating centre

Chesterfield Royal Hospital Chesterfield Road Calow Chesterfield United Kingdom S44 5BL

Study participating centre Doncaster Royal Infirmary Armthorpe Road

Doncaster United Kingdom DN2 5LT

Study participating centre Dorset County Hospital

Dorset County Hospital Princes Street Dorchester United Kingdom DT1 1TS

Study participating centre James Paget University Hospital Lowestoft Road Gorleston Great Yarmouth United Kingdom NR31 6LA

Study participating centre

King's Mill Hospital Sherwood Forest Hospitals NHS Foundation Trust Mansfield Road Sutton-in-Ashfield United Kingdom NG17 4JL

Study participating centre Leicester General Hospital Gwendolen Road Leicester United Kingdom LE5 4PW

Study participating centre

Leicester Royal Infirmary Infirmary Square Leicester United Kingdom LE1 5WW

Study participating centre Macclesfield District General Hospital Macclesfield District Hospital Victoria Road Macclesfield United Kingdom SK10 3BL

Study participating centre

Manor Hospital Moat Road Walsall United Kingdom WS2 9PS

Study participating centre New Cross Hospital Royal Wolverhampton Wolverhampton Road

Heath Town Wolverhampton United Kingdom WV10 0QP

Study participating centre Pilgrim Hospital Sibsey Road Boston United Kingdom PE21 9QS

Study participating centre Queen Elizabeth Hospital

Queen Elizabeth Medical Centre Edgbaston Birmingham United Kingdom B15 2TH

Study participating centre Queen Elizabeth the Queen Mother Hospital St. Peters Road Margate United Kingdom CT9 4AN

Study participating centre Queens Medical Centre Nottingham University Hospital Derby Road Nottingham United Kingdom NG7 2UH

Study participating centre

Raigmore Hospital

Old Perth Rd Inverness United Kingdom IV2 3UJ

Study participating centre Royal Albert Edward Infirmary Wigan Lane Wigan United Kingdom WN1 2NN

Study participating centre Royal Stoke University Hospital Newcastle Road Stoke-on-trent United Kingdom ST4 6QG

Study participating centre Royal United Hospital Peasedown Roman Way Bath Business Park Peasedown St. John Bath United Kingdom BA2 8SG

Study participating centre Salisbury District Hospital Salisbury District Hospital Odstock Road Salisbury United Kingdom SP2 8BJ

Study participating centre Sandwell General Hospital Lyndon West Bromwich United Kingdom B71 4HJ

Study participating centre

St Marks Hospital Watford Road Harrow United Kingdom HA1 3UJ

Study participating centre St Richards Hospital Laboratory St. Richards Hospital Spitalfield Lane

Chichester United Kingdom PO19 6SE

Study participating centre University Hospital Coventry & Warwickshire Clifford Bridge Road Walsgrave Coventry United Kingdom CV2 2DX

Study participating centre University Hospital of North Tees Hardwick Road Stockton-on-tees United Kingdom TS19 8PE

Study participating centre The Worcestershire Royal Hospital Newtown Road Worcester United Kingdom WR5 1ZL

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Study participating centre York Hospital Wigginton Road York United Kingdom YO31 8HE

Study participating centre Norfolk & Norwich University Hospital Colney Lane Colney Norwich United Kingdom NR4 7UY

Sponsor information

Organisation University of Birmingham

Sponsor details Edgbaston Birmingham England United Kingdom

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researchgovernance@contacts.bham.ac.uk

Sponsor type University/education

Website http://www.birmingham.ac.uk/index.aspx

ROR https://ror.org/03angcq70

Funder(s)

Funder type Government

Funder Name NIHR Central Commissioning Facility (CCF)

Funder Name Research for Patient Benefit Programme

Alternative Name(s) NIHR Research for Patient Benefit Programme, RfPB

Funding Body Type Government organisation

Funding Body Subtype National government

Location United Kingdom

Results and Publications

Publication and dissemination plan Planned publication in a high-impact peer-reviewed journal

Intention to publish date 30/06/2023

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Manjinder Kaur (m.kaur@bham.ac.uk/rocss@trials.bham.ac.uk) . Access to anonymised data may be granted following review.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol file</u>	version 8.0	12/01/2021	30/08/2022	No	Νο
<u>Results article</u>		02/08/2024	12/08/2024	Yes	No