# SaFaRI: Sacral nerve stimulation versus the FENIX TM magnetic sphincter augmentation for adult faecal incontinence: a randomised Investigation

Submission date 13/06/2014	<b>Recruitment status</b> No longer recruiting	[X] Prospectively registered		
		☐ Protocol		
Registration date 17/06/2014	Overall study status Completed	Statistical analysis plan		
		[X] Results		
<b>Last Edited</b> 08/11/2022	<b>Condition category</b> Signs and Symptoms	Individual participant data		

#### Plain English summary of protocol

Background and study aims

Faecal incontinence (FI) affects between 5% and 10% of the adult population. It is more common in females and among older people, and is the second most common cause of admission to a nursing home. It affects a persons social, physical, and mental well-being and it is a substantial and increasing burden on NHS health resources. The purpose of the SaFaRI study is to look at two different surgical treatments for those suffering from Faecal Incontinence (FI): surgery to implant the FENIX TM Magnetic Sphincter Augmentation (MSA), which is a string of magnetic beads implanted around the muscle that controls the bowel (anal sphincter), and surgery for Sacral Nerve Stimulation (SNS), which involves implanting an electrode and battery to stimulate the nerves that control bowel continence. Surgery for SNS implants is the current preferred treatment for FI and is approved by the National Institute for Health and Clinical Excellence (NICE). The SaFaRI study has been designed to find out how well the FENIX TM MSA implant helps to control FI in the short-term and to see how much either surgical option improves the day-to-day life and overall well-being of FI sufferers. It will also look at the cost-effectiveness of each procedure for the NHS.

## Who can participate?

Participants that suffer from moderate to severe FI symptoms (2 or more incontinent episodes per week) and have done so for more than 6 months and whos condition has not improved with other treatments.

What are the possible benefits and risks of participating?

The information gained from the study will be helpful in guiding surgeons as to the best approach for the surgical treatment of FI, which will benefit other sufferers with this condition.

## Where is the study run from?

The study will be co-ordinated by the Clinical Trials Research Unit at the University of Leeds and will run in approximately 20 hospitals across the UK.

When is study starting and how long is it expected to run for? Recruitment is anticipated to start in January 2015 and will last for 36 months.

Who is funding the study? National Institute for Health Research (NIHR) Health Technology Assessment (HTA) Programme.

Who is the main contact? Julie Croft safari@leeds.ac.uk

# Contact information

# Type(s)

Scientific

#### Contact name

Prof David Jayne

#### Contact details

c/o Miss Julie Croft, Senior Trial Manager Clinical Trials Research Unit Leeds Institute for Clinical Trials Research University of Leeds Leeds United Kingdom LS2 9JT +44 (0)113 343 1477 safari@leeds.ac.uk

# Additional identifiers

Protocol serial number HTA 12/35/07

# Study information

#### Scientific Title

Safari: Sacral nerve stimulation versus the FENIX TM magnetic sphincter augmentation for adult faecal incontinence: a prospective, UK multi-site, parallel-group, randomised clinical study investigating the safety and efficacy of the FENIX TM magnetic sphincter augmentation (MSA) compared to sacral nerve stimulation (SNS) for adult FI.

#### Acronym

SaFaRI

# Study objectives

The SaFaRI study aims to evaluate the safety and efficacy of the FENIX TM MSA implants compared to SNS implants for the treatment of moderate to severe faecal incontinence in adults. The study will also compare the two types of surgery in terms of quality of life for patients and cost-effectiveness.

More details can be found at: http://www.nets.nihr.ac.uk/projects/hta/123507

# Ethics approval required

Old ethics approval format

#### Ethics approval(s)

NRES Committee Yorkshire & The Humber Leeds West, submitted 02/04/2014, ref. 14/YH/0128

#### Study design

Prospective UK multisite, parallel-group, randomised clinical study investigating the safety and efficacy of FENIX TM MSA in adult FI resistant to conservative therapies compared to SNS

#### Primary study design

Interventional

## Study type(s)

Treatment

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

Faecal incontinence (FI) in adults

#### **Interventions**

SNS this is a two-stage procedure whereby a temporary percutaneous electrode is used to stimulate the sacral nerves for a period of two weeks, after which the effect on continence is assessed and the electrode removed. If the response is positive (≥ 50% improvement in continence episodes), a permanent electrode and battery (Interstim II®) are implanted. Both temporary and permanent SNS are performed as day-case procedures.

FENIX TM MSA implantation is a minimally invasive surgical procedure whereby the FENIX TM MSA device is implanted, through a perineal incision, around the anal sphincter complex under radiological control. It typically involves a hospital stay of 1-3 days.

## Intervention Type

Other

#### Phase

Not Applicable

#### Primary outcome(s)

Difference in the percentage of successes, as defined by the device in situ and ≥ 50% improvement in the CCIS (Cleveland Clinic Incontinence Score) between the two treatments at 18 months post-randomisation

#### Key secondary outcome(s))

1. Safety of FENIX TM MSA or SNS, as judged by explant rates and operative (including those occurring during theatre-time and post-surgery stay) and post-operative complications (up to

and including 12 months from the date of the last study surgery)

- 2. Change in generic and disease-specific QoL from baseline, as measured by CCIS (Cleveland Clinic Incontinence Score), OD-score (Obstructed Defecation Score), FiQOL (Faecal Incontinence Quality of Life), EQ-5DTM and SF12® at 6, 12 and 18 months post-randomisation
- 3. Cost-effectiveness, using QALY outcome measures, assessed by EQ-5D, SF12, Health Resource Use Questionnaires and HES (Hospital Episode Statistics) data

#### Completion date

31/12/2018

# **Eligibility**

#### Key inclusion criteria

- 1. Aged ≥ 18 years
- 2. Able to provide written informed consent
- 3. FI for more than 6 months
- 4. Incontinent episodes of  $\geq$  2 per week
- 5. Suitable candidate for surgery, as judged by the operating surgeon (suitability assessment includes general fitness and conservative treatments for FI having proved ineffective.)
- 6. Suitable for either FENIX TM MSA or SNS
- 7. Anal sphincter defect < 180° as documented on endoanal ultrasound scan
- 8. Able and willing to comply with the terms of the protocol including Quality of Life (QoL) questionnaires

## Participant type(s)

Patient

#### Healthy volunteers allowed

No

#### Age group

Adult

#### Lower age limit

18 years

#### Sex

All

#### Total final enrolment

99

#### Key exclusion criteria

- 1. Previous interventions for FI i.e. SNS, FENIX TM MSA or ABS
- 2. Chronic gastrointestinal motility disorders causing incontinence due to diarrhoea
- 3. Obstructed defaecation, as defined by an inability to satisfactorily evacuate the rectum (Obstructed Defecation score(OD-score) >8)
- 4. Anal sphincter defect ≥ 180°, as documented on endoanal ultrasound scan
- 5. An electric or metallic implant within 10cm of anal canal
- 6. Co-existent systemic disease (e.g. scleroderma, etc.) impacting on continence

- 7. Active anorectal sepsis
- 8. Diagnosis of colorectal or anal cancer within 2 years
- 9. External rectal prolapse
- 10. Significant scarring of the anorectum that, as judged by the treating surgeon, would prohibit FENIX TM MSA implantation or put the patient at high risk of implant erosion
- 11. Pregnancy (It is the local surgeons responsibility to ensure this is assessed in women of child-bearing potential according to local standard of care.)
- 12. Immunocompromise, including haematological abnormalities and treatment with steroids or other immunomodulatory medicines.
- 13. Congenital spinal abnormalities, preventing SNS implantation
- 14. Known requirement for future Magnetic Resonance Imaging (MRI) surveillance, which would be contraindicated in the presence of metallic implant
- 15. Suspected or known allergies to titanium

# Date of first enrolment

01/01/2015

#### Date of final enrolment

31/12/2018

# Locations

#### Countries of recruitment

United Kingdom

England

Study participating centre c/o Miss Julie Croft, Senior Trial Manager Leeds United Kingdom LS2 9JT

# Sponsor information

#### Organisation

University of Leeds (UK)

#### **ROR**

https://ror.org/024mrxd33

# Funder(s)

# Funder type

#### Funder Name

NIHR Health Technology Assessment Programme - HTA (UK)

# **Results and Publications**

# Individual participant data (IPD) sharing plan

Not provided at time of registration

# IPD sharing plan summary

Not provided at time of registration

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	HTA report	01/03/2021	24/03/2021	Yes	No
HRA research summary			28/06/2023		No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes