Congenital malrotation in adults

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|-------------------------------|---|--------------------------------|--|--|
| 02/11/2015 | | ☐ Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 25/02/2016 | Completed | [X] Results | | |
| Last Edited 02/04/2020 | Condition category Digestive System | [] Individual participant data | | |

Plain English summary of protocol

Background and study aims

Congenital intestinal malrotation, or congenital bowel malrotation, is a condition in which the intestines are twisted. It usually happens when the intestine fails to coil into the correct position in a developing foetus (at around the tenth week of development). In most cases, malrotation is detected within the first month of life however in some people it is not diagnosed until adulthood. When it is diagnosed, the only appropriate treatment option is corrective surgery. During this surgery, the intestine is untwisted and placed into its correct position, or segments are removed if they are damaged and unable to work properly. As the condition usually discovered in childhood, when an adult is suffering from abdominal pain congenital intestinal malrotation is not usually suspected. This means that in many cases it is only discovered in if it is spotted on a scan looking for something else (incidental finding). The aim of this study is to find out how many cases of abdominal pain in adults is due to congenital intestinal malrotation. The study will also look at whether having corrective surgery when malrotation is detected has an effect of their abdominal pain in the long-run.

Who can participate?

Patients over 16 years of age who have intestinal malrotation and are suffering from abdominal pain.

What does the study involve?

Patients who have agreed to take part in the study have a CT scan of their abdomen in order to assess how severe the malrotation is. The patients are then split into three groups based on their age in order to find out if there is a link between the degree of malrotation and their age. The patients then undergo their corrective surgery as planned. During 2012 and 2013, patients who have had corrective surgery between 1 and 12 years previously are contacted by telephone in order to find out if their condition has improved. The patients are asked whether they have experienced pain, nausea, vomiting or constipation, since their surgery.

What are the possible benefits and risks of participating? There are no direct benefits or risks to patients taking part in this study.

Where is the study run from? Karolinska Institute (Sweden) When is the study starting and how long is it expected to run for? December 2002 to December 2018

Who is funding the study?

- 1. Swedish Research Council (Sweden)
- 2. The Foundation Frimurare Barnhuset Stockholm (Sweden)
- 3. Stockholm City Council (Sweden)
- 4. Swedish Society for Medical Research (Sweden)
- 5. Karolinska Institute (Sweden)

Who is the main contact? Dr Karin Strigård

Contact information

Type(s)

Public

Contact name

Dr Karin Strigård

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers 2012/957-31/3

Study information

Scientific Title

Congenital intestinal malrotation in adolescent and adult patients – a 12-year clinical and radiological survey

Study objectives

Symptomatic malrotation may be a cause of abdominal pain in adults.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The Regional Ethical Review Board Stockholm (Etikprövningsnämnden Stockholm), 20/06/2012, ref: 2012/957-31/3

Study design

Single-cenre longitudinal study

Primary study design

Observational

Secondary study design

Longitudinal study

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Congenital intestinal malrotation

Interventions

All medical records are evaluated with regards to symptoms, surgical procedures, previous disorders and outcomes. For analysis of differences according to age, the patients were divided into three groups (15-20 years, 21-50 years, 51-67 years). Symptomatic malrotation is then treated by corrective surgery, and routinely assessed six weeks, six months and 12 months after surgery.

During 2012-2013 (1 to 12 years after surgery) a research nurse performed telephone interviews with a semi-structured concept concerning the patients' past and present situation and possible remaining symptoms after surgery. The questions focused on remaining intense or chronic pain, postprandial nausea, vomiting and constipation. Patients were also asked whether they regarded their general physical condition as improved to a high degree, improved with some reservation or without any notable improvement.

Intervention Type

Procedure/Surgery

Primary outcome measure

Symptom resolution following surgery is determined using semi-structured telephone interviews with a research nurse, during 2012-2013 (1 to 12 years after surgery).

Secondary outcome measures

Degree of malrotation is determined using CT scanning at baseline.

Overall study start date

12/02/2002

Completion date

31/12/2018

Eligibility

Key inclusion criteria

- 1. Aged 16 years or over
- 2. Abdominal pain
- 3. Malrotation on CT scan

Participant type(s)

Patient

Age group

Mixed

Sex

Both

Target number of participants

39

Total final enrolment

39

Key exclusion criteria

- 1. Not understanding oral or written information
- 2. Under 15 years of age

Date of first enrolment

12/02/2002

Date of final enrolment

10/11/2013

Locations

Countries of recruitment

Sweden

Study participating centre Karolinska University Hospital

Hälsovägen 1 - 3 Stockholm Sweden 141 86

Sponsor information

Organisation

Karolinska Institutet

Sponsor details

Solnavägen 1 171 77 Solna Sweden Stockholm Sweden 17177

Sponsor type

University/education

Website

http://ki.se/en/about/startpage

ROR

https://ror.org/04hmgwg30

Funder(s)

Funder type

Research council

Funder Name

Swedish Research Council (Vetenskapsrådet)

Alternative Name(s)

Swedish Research Council, VR

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Sweden

Funder Name

The Foundation Frimurare Barnhuset Stockholm (Stiftelsen Frimurare Barnhuset i Stockholm)

Alternative Name(s)

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Sweden

Funder Name

Stockholm City Council (Kommunfullmäktige, Stockholms Stad)

Funder Name

Swedish Society for Medical Research (Svenska Sällskapet för Medicinsk Forskning)

Alternative Name(s)

Swedish Society for Medical Research, SSMF

Funding Body Type

Private sector organisation

Funding Body Subtype

Associations and societies (private and public)

Location

Sweden

Funder Name

Karolinska Institute (Karoklinska Institutet)

Alternative Name(s)

Karolinska Institute, KI

Funding Body Type

Government organisation

Funding Body Subtype

Local government

Location

Sweden

Results and Publications

Publication and dissemination plan

Publication in two manuscripts detailing study reults and 5 year follow-up.

Intention to publish date

30/06/2019

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Available on request

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | results | 01/03/2016 | 02/04/2020 | Yes | No |