

What groups of people are more prone to complications after Bariatric Surgery, and does acid suppression in the stomach play a role? A multiregister study

Submission date 20/09/2016	Recruitment status No longer recruiting	☐ Prospectively registered
Registration date 04/11/2016	Overall study status Completed	☐ Protocol
Last Edited 21/04/2020	Condition category Nutritional, Metabolic, Endocrine	☐ Statistical analysis plan
		☒ Results
		☐ Individual participant data

Plain English summary of protocol

Background and study aims

Since obesity (being very overweight) is a growing health problem all over the world, more and more people are having weight-loss surgery because of its proven effects on obesity and related health problems. Having an operation is never risk free, and although weight-loss surgery is relatively safe, there are certain groups of people who are more at risk for complications. Drugs reducing stomach acid are used with varying degrees of success for the purpose of reducing complications, but it's not clear how great this effect is and who benefits from it. The purpose of this study is to identify groups of patients that are at higher risk for complications and who could benefit most from acid suppression in the stomach.

Who can participate?

Patients that had weight loss surgery (gastric bypass) in Sweden between 2009-2014 and registered in the Scandinavian Obesity Surgery Registry.

What does the study involve?

Data is taken from the Scandinavian Obesity Surgery Register (SOReg) for patients that have had first time gastric bypass surgeries from 2009 through 2014. In addition, matching socio-economic data (that is data describing a person's age, gender and income for example) is taken from Statistics Sweden and records on proton-pump inhibition prescriptions from the National Board of Health and Welfare's Drug Registry. Analysis is then done on this data, to see whether what type of patient is least likely to develop complications after weight loss surgery.

What are the possible benefits and risks of participating?

Not provided at time of registration

Where is the study run from?

Department of Surgery and Orthopedics, Lycksele Hospital

When is the study starting and how long is it expected to run for?
October 2016 to May 2017

Who is funding the study?
1. County Council of Västerbotten (Sweden)
2. Umeå University (Sweden)

Who is the main contact?
1. Dr Jeff Wennerlund (public)
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Additional identifiers

Protocol serial number

PPI-GBP 001

Study information

Scientific Title

Which sub-groups of people are more prone to complications after complications after Bariatric Surgery, and does post-operative prophylaxis with proton-pump inhibition play a role? A multiregister study

Acronym

PPI-GBP

Study objectives

Which combinations of factors predispose to complications after gastric bypass surgery? Does prophylaxis with proton-pump inhibition play a role? What differences can be ascertained from gender, age, existing co-morbidity, BMI, and socio-economic factors? The underlying hypothesis is that certain factors play a role in complications, and if/where proton-pump inhibition has a place in the clinical setting.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Regional Ethics Committee of Umeå 12/1/2016. Case number 2015/367-31

Study design

Single-site observational cohort study

Primary study design

Observational

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Morbid obesity

Interventions

Patient specific gender, age, BMI, existing co-morbidities, socio-economic status, and the presence of proton-pump inhibition is to be collected and compared with the occurrence of post-operative complications in a longitudinal multi-variate study .

After collecting data from the three registers, statistical analyses will be made focusing on the outcome of post-operative complications and their severity (according to the Clavien-Dindo scale) and necessary interventions, if any. Logistic regression models will be used in multi-variate analyses to pinpoint those factors (patient specific age, gender, BMI, pre-existing health problems, occurrence of proton-pump inhibition prophylaxis, and socioeconomic factors) that

are associated with higher rates of complications, both as a total rate and for each individual complication. The rate of complications are also controlled against the Drug Registry if the prophylaxis was actually retrieved, or if therapy was prescribed and retrieved for other reasons.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Omeprazole, esomeprazole

Primary outcome(s)

Identification of sub-groups according to age, gender, body mass index measured in body weight (kg)/ body length (m) squared, and pre-existing health problems at baseline that have less post-operative complications and severity thereof (according to the Clavien-Dindo scale) due to prophylaxis with proton-pump inhibition, measured at 30 days and at 1 and 2 years post-operatively.

Key secondary outcome(s))

Identification of socioeconomic factors at baseline that impact related health problems, the rate of post-operative complications, and occurrence and adherence to proton-pump prophylaxis.

Completion date

31/05/2017

Eligibility

Key inclusion criteria

Patients eligible and accepted for primary laparoscopic gastric bypass surgery in Sweden during 2009-2014, and registered in the Scandinavian Obesity Surgery Registry (SOReg).

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

All

Sex

All

Total final enrolment

37301

Key exclusion criteria

Participants that do not fulfill inclusion criteria

Date of first enrolment

31/10/2016

Date of final enrolment

31/01/2017

Locations

Countries of recruitment

Sweden

Study participating centre

Department of Surgery and Orthopedics, Lycksele Hospital

Hedlundavägen

Lycksele lasarett

Lycksele

Sweden

92182

Sponsor information

Organisation

County Council of Västerbotten (Västerbottens läns landsting)

ROR

<https://ror.org/04xvhsp09>

Funder(s)

Funder type

University/education

Funder Name

County Council of Västerbotten (Västerbottens läns landsting)

Funder Name

Umeå Universitet

Alternative Name(s)

Umeå University, Umeje universitiähta, Universitas Umenis

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

Sweden

Results and Publications

Individual participant data (IPD) sharing plan

Collecting data from these registers is done under certain conditions. These include that the data may not be shared with a third party, is to be used only according to the purpose stated in the applications and the signed contracts, and that the data is to be erased after the project is completed. Further the information is to be handled in the same manner as patient charts, with utmost confidentiality, with identifying information separate from the raw data and calculation files.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/05/2020	21/04/2020	Yes	No