

Randomized Controlled Trial of Laparoscopic Primary Crural Repair versus Primary Repair with Circular Bio-absorbable Hiatal Mesh Reinforcement in Hiatal Hernia Repair

No registrations found.

| | |
|------------------------------|------------------|
| Ethical review | Positive opinion |
| Status | Pending |
| Health condition type | - |
| Study type | Interventional |

Summary

ID

NL-OMON27270

Source

Nationaal Trial Register

Brief title

PRIME-II

Health condition

Adults with giant hiatal hernia`s.

Sponsors and support

Primary sponsor: Isala, Zwolle, the Netherlands.

Source(s) of monetary or material Support: None

Intervention

Outcome measures

Primary outcome

Radiologic recurrence rate (CT-scan) of hiatal hernia.

Secondary outcome

- Development of post-operative dysphagia.
- Overall satisfaction with surgical outcome.
- Major complications
 - „X Postoperative hemorrhage with necessity for reoperation
 - „X Organ perforation (stomach, esophagus, small intestine, colon)
 - „X Major hemorrhage (>500cc) during operation
 - „X Lung or cardiac injury during operation
- Minor complications
 - „X Surgical site infection
 - „X Minor bleeding (<500cc) during operation
 - „X Postoperative pneumonia
 - „X Postoperative urinary tract infection
 - „X Postoperative deep venous thrombosis

Study description

Background summary

Rationale: Laparoscopic hiatus hernia repair is associated with a high recurrence rate. Repair reinforced with mesh lowers short-term recurrence but can cause dysphagia and visceral erosion. Results of the PRIME trial, in which non-absorbable mesh reinforcement of the posterior cruroplasty was investigated, showed equal recurrence compared to primary repair after 6 months. It is hypothesized that circular absorbable MESH reinforcement of the hiatus could reduce recurrence rate.

Objective: To define the optimum laparoscopic hiatus hernia repair, ensuring long-term effect with minimal postoperative side effects.

Study design: Prospective blinded randomized controlled superiority trial comparing two laparoscopic procedures for hiatus hernia repair (110 versus 110).

Study population: Adult patients with proven hiatus hernia type II-IV (defined by preoperative CT-scan).

Intervention: Patients will be randomized to undergo a laparoscopic primary crural repair with sutures alone or suture repair augmented with prosthetic absorbable, circular mesh at the hiatus.

Main study parameters/endpoints: Radiologic integrity of the hiatal repair is the main endpoint. Secondary objectives are clinical recurrence of the hernia, development of post-operative reflux disease, postoperative side effects and satisfaction with surgical outcome.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Preoperatively included patients will undergo an endoscopy and CT scan according to standard clinical practice. Questionnaires will be filled in pre-operatively and at 3, 6, 12 months post-operatively and then yearly for up to 10 years. Patients will undergo similar to standard post-operative follow-up and including CT-scan at 3 months and 1 and 5 years after surgery.

Study objective

Bio-absorbable circular mesh reinforcement of the hiatus reduces recurrence rate after hiatal hernia repair.

Study design

3 months postoperatively

3 years postoperatively

Intervention

1. Laparoscopic primary hiatal hernia repair and 180 degrees fundoplication.
2. Laparoscopic primary hiatal repair with circular bio-absorbable mesh reinforcement and 180 degrees fundoplication.

Contacts

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Eligibility criteria

Inclusion criteria

- Age > 18 years
- Hiatus hernia type II-IV
- Laparoscopic surgical repair clinically indicated
- Fit for surgery
- Suitable for both procedures

Exclusion criteria

- Age < 18 years
- Hiatus hernia type I.
- No informed consent
- Previous anti-reflux surgery or repair for hiatus hernia
- Pregnancy
- Achalasia

Study design

Design

| | |
|---------------------|-------------------------------|
| Study type: | Interventional |
| Intervention model: | Parallel |
| Allocation: | Randomized controlled trial |
| Masking: | Double blinded (masking used) |
| Control: | N/A , unknown |

Recruitment

| | |
|---------------------------|-------------|
| NL | |
| Recruitment status: | Pending |
| Start date (anticipated): | 01-01-2020 |
| Enrollment: | 220 |
| Type: | Anticipated |

IPD sharing statement

Plan to share IPD: Yes

Ethics review

| | |
|-------------------|------------------|
| Positive opinion | |
| Date: | 21-05-2017 |
| Application type: | First submission |

Study registrations

Followed up by the following (possibly more current) registration

ID: 48062
Bron: ToetsingOnline
Titel:

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

| Register | ID |
|----------|----------------|
| NTR-new | NL6331 |
| NTR-old | NTR6523 |
| CCMO | NL69356.075.19 |
| OMON | NL-OMON48062 |

Study results