# Bard® PolySoft\* pre peritoneal mesh versus Parietene\* ProGrip\* self-fixing semi-resorbable mesh and chronic inguinal pain development.

Published: 23-03-2010 Last updated: 10-08-2024

Objective of the Trial:Does the use of a Bard® Polysoft\* preperitoneal mesh result in less chronic pain than after the use of a ProGrip\*self-fixing semi-resorbable mesh for patients with an inquinal hernia repair through an anterior approach?

Ethical review Approved WMO

**Status** Recruitment stopped

**Health condition type** Therapeutic procedures and supportive care NEC

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON35542

#### **Source**

ToetsingOnline

#### **Brief title**

SoftGrip Trial

## **Condition**

Therapeutic procedures and supportive care NEC

#### Synonym

groin hernia, inguinal hernia

## Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Ziekenhuisvoorzieningen Gelderse Vallei

1 - Bard® PolySoft\* pre peritoneal mesh versus Parietene\* ProGrip\* self-fixing semi ... 4-05-2025

**Source(s) of monetary or material Support:** Ministerie van OC&W

#### Intervention

**Keyword:** chronic pain, inguinal hernia, mesh

#### **Outcome measures**

## **Primary outcome**

Objectives:

Primary:

- Alternation in the painscore on the Visual Analog Scale and the 0-6 point

Verbal Descriptor Scale.

## **Secondary outcome**

Objectives:

Secundary:

- Occurrence of hernia inguinalis recurrence objectified by physical

examination and/or ultrasound.

- Complications; for example recurring haemorrhage and infections
- Alternation in the quality of life measured by the SF-36 questionaire.

# **Study description**

## **Background summary**

Background:

With the introduction of prosthesis material, the Lichtenstein technique has reduced the recurrence rate after inguinal hernia surgery to an acceptable level (2%). Polypropylene mesh is the first choice prosthesis material in most Dutch hospitals.

However, chronic pain after inguinal hernia surgery remains a problem. A number of studies demonstrated that 20 - 40% of patients experience chronic pain after elective inguinal hernia surgery1-8. This is due to the occurrence of extensive

fibrosis that is induced by a standard polypropylene mesh, although the method of fixation, with non-resolvable stitches, might also play a role in the pathogenesis of chronic pain.

Therefore two new types of mesh prostheses have been developed to prevent the occurrence of chronic pain. The first type is self-adhesive and light-weight, the second is self-fixing and has the advantage of a preperitoneal correction through an open anterior approach.

In theory this could possibly prevent chronic pain on both pathogenesis pathways.

Both the extent of fibrosis, as the chance of nerve-incarcaration and/or periostitis through incorrectly placed sutures, could be reduced.

## Study objective

Objective of the Trial:

Does the use of a Bard® Polysoft\* preperitoneal mesh result in less chronic pain than after the use of a ProGrip\*self-fixing semi-resorbable mesh for patients with an inguinal hernia repair through an anterior approach?

## Study design

Trial Design:

This study is a double blind randomized controlled trial in patients with a unilateral primary inguinal hernia. A total of 258 patients will be included into the entire study and randomized into either ARM A, the control group, ProGrip\* mesh (129 patients), or ARM B, Bard® Polysoft\* mesh (129 patients). The Bard® Polysoft\* mesh will be placed preperitoneal, whilst the ProGrip mesh will be placed according to the Lichtenstein technique. In both groups correction will be performed through an anterior approach.

## Study burden and risks

Hypothesis:

Compared to a ProGrip self-fixing semi-resorbable mesh the use of a Bard® Polysoft\* preperitoneal mesh results in less chronic groin pain in inguinal herniorrhaphy patients.

# **Contacts**

#### **Public**

Ziekenhuisvoorzieningen Gelderse Vallei

W.Brandtlaan 10 6710 HN Ede Nederland

#### Scientific

Ziekenhuisvoorzieningen Gelderse Vallei

W.Brandtlaan 10 6710 HN Ede Nederland

## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

## **Inclusion criteria**

- 1. Age of 18 years or older
- 2. An unilateral primary inguinal hernia.
- 3. Adequate follow-up possible

# **Exclusion criteria**

- 1. Incarcerated inguinal hernia
- 2. Recurrent inguinal hernia
- 3. Local inguinal inflammation
- 4. Concurrent femoral hernia
- 5. ASA 4 or more
- 6. Adequate follow-up impossible
- 7. Previous inguinal surgery

# Study design

## **Design**

Study type: Observational non invasive

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Active

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 14-04-2010

Enrollment: 258

Type: Actual

# **Ethics review**

Approved WMO

Date: 23-03-2010

Application type: First submission

Review commission: METC NedMec

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

# In other registers

Register ID

CCMO NL24683.041.09