# Multicentre study of the reduction of steps (measured by an electronic pedometer) after 4 different types of repair for inguinal hernia

Submission date	Recruitment status	Prospectively registered
29/05/2008	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
20/06/2008	Completed	Results
Last Edited	Condition category	Individual participant data
20/06/2008	Digestive System	[] Record updated in last year

# Plain English summary of protocol

Not provided at time of registration

# Contact information

## Type(s)

Scientific

#### Contact name

Prof Yves Van Nieuwenhove

#### Contact details

Laarbeeklaan 101 Brussels Belgium 1090

# Additional identifiers

Protocol serial number

B.U.N. B14320072331

# Study information

#### Scientific Title

Multicentre cohort study evaluating ambulatory activity reduction after Lichtenstein, laparoscopic Totally ExtraPeritoneal, KUgel patch or Polysoft repair of primary inguinal hernia (LITEKUP trial)

#### Acronym

LITEKUP trial

#### **Study objectives**

To compare the short-term functional outcome after four different techniques of inguinal hernia repair in an ambulatory setting, namely, the Lichtenstein repair, the laparoscopic totally extraperitoneal repair, the open retroperitoneal Kugel patch repair and the Polysoft® patch repair.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Leading Ethical Committee of the University Hospital Brussels (Universitair Ziekenhuis Brussel). Date of approval: 11/10/2007

#### Study design

Prospective, multicentre, cohort, observational study

#### Primary study design

Observational

#### Study type(s)

Treatment

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

Inguinal hernia

#### **Interventions**

This is an observational cohort study comparing the reduction in ambulatory activity (RAA) after four common techniques of inguinal hernia repair of patients with primary inguinal hernia. The four techniques are:

- 1. Lichtenstein repair
- 2. Laparoscopic totally extraperitoneal repair
- 3. Open retroperitoneal Kugel patch repair
- 4. Polysoft® patch repair

Count of steps will be carried out 1 week before and 2 weeks after scheduled inguinal hernia repair, measured with an electronic pedometer.

#### Intervention Type

Other

#### Phase

**Not Specified** 

#### Primary outcome(s)

Count of steps 1 week before and 2 weeks after scheduled inguinal hernia repair, measured with an electronic pedometer.

#### Key secondary outcome(s))

- 1. Recurrence rate after 12-24 months. This will be assessed by clinical examination during clinical follow-up after 2 weeks, 6, 12 and 24 months. Independent examination will be performed at 12 and 24 months to assess recurrence and chronic pain.
- 2. Acute pain at the affected groin side measured daily the week before, the day of and the first 2 weeks after surgery, using a visual analogue scale (VAS) indicating no pain at 0 mm and worst pain ever experienced at 100 mm.
- 3. Chronic groin pain syndrome at the operated side after 12-24 months. Classified as follows: No pain: no discomfort experienced

Mild pain: defined to the patient as discomfort that did not limit activity, with a return to prehernia lifestyle

Moderate pain: defined as pain preventing return to normal preoperative activities (i.e. inability to continue with prehernia activities such as golf, tennis and other sports, and inability to lift objects, without pain, that patient had been lifting before the hernia occurrence)

Severe pain: pain that incapacitated the patient at frequent intervals or interfered with activities of daily living (i.e. pain constantly present or intermittently present but so severe as to impair normal activities, such as walking)

#### Completion date

31/05/2012

# **Eligibility**

#### Key inclusion criteria

Consecutive patients (both males and females, >18 years of age) with a diagnosis of primary unilateral inguinal hernia presenting in the participating centres for the surgical repair of their hernia in an ambulatory setting.

## Participant type(s)

Patient

#### Healthy volunteers allowed

No

#### Age group

Adult

#### Lower age limit

18 years

#### Sex

All

#### Key exclusion criteria

- 1. Incarcerated inquinal hernia
- 2. Life expectancy less than two years
- 3. Pregnancy
- 4. American Society of Anaesthesiology (ASA) class IV or V
- 5. Extensive lower abdominal surgery or severe local inflammation
- 6. Inability to sign the informed consent.
- 7. Indication for other type of surgery for various reasons

- 8. Patients unable to walk (paralysed or bedridden patients)
- 9. Bilateral hernia repair
- 10. Large scrotal hernias
- 11. Concomitant abdominal surgery
- 12. Body mass index (BMI)  $\geq$  35 kg/m<sup>2</sup>
- 13. Liver cirrhosis (Child C)
- 14. Known abuse of alcohol or drugs
- 15. Ongoing long term analgesic or steroid treatment
- 16. Patients under clopidogrel or warfarin must be switched to subcutaneous (sc) low-molecular-weight (lmw) heparin
- 17. Severely compromised physical or psychological health, that in the investigators opinion will affect patients compliance
- 18. Concurrently participating in another clinical trial

#### Date of first enrolment

01/06/2008

#### Date of final enrolment

31/05/2012

# Locations

#### Countries of recruitment

Belgium

## Study participating centre Laarbeeklaan 101

Brussels Belgium 1090

# Sponsor information

## Organisation

Royal Belgian Society of Surgery, Section of Abdominal Wall Surgery (BSAWS) (Belgium)

#### **ROR**

https://ror.org/04yy1mz94

# Funder(s)

## Funder type

Hospital/treatment centre

#### Funder Name

Royal Belgian Society of Surgery, Section of Abdominal Wall Surgery (BSAWS) (Belgium)

# **Results and Publications**

Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

#### **Study outputs**

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet
Participant information sheet
11/11/2025 No Yes