Effects of anaesthetic technique on inflammatory stress response following laparoscopic hysterectomy in endometrial cancer patients: general anaesthesia combined with Transverse Abdominal Plane blockade (TAP) versus general anaesthesia and thoracic epidural analgesia (TEA).

Published: 07-03-2016 Last updated: 20-04-2024

Determine which anaesthetic technique (general anaesthesia in combination with TAP blockade versus general anaesthesia in combination with thoracic epidural analgesia) offers the most benefits, with respect to attenuation of the surgical inflammatory...

**Ethical review** Not approved **Status** Will not start

**Health condition type** Reproductive neoplasms female malignant and unspecified

**Study type** Observational non invasive

# Summary

### ID

NL-OMON43516

#### Source

ToetsingOnline

#### **Brief title**

TAP versus TEA

### **Condition**

- Reproductive neoplasms female malignant and unspecified
- Uterine, pelvic and broad ligament disorders
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### **Synonym**

endometrium cancer, Endometrium carcinoma

### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Antoni van Leeuwenhoek Ziekenhuis

**Source(s) of monetary or material Support:** CGOA voor betaling bepalingen

### Intervention

**Keyword:** anesthesia technique, Endometriumcarcinoma, inflammatory stress response

### **Outcome measures**

### **Primary outcome**

Levels of cytokines (pro- and anti-inflammatory), procalcitonin, NLR and

C-reactive protein

### **Secondary outcome**

- 1) Intensity of wound pain at rest and during movement by Numeric Rating Scale
- 2) The number of milligrams of opioids and NSAID consumed by the patient.
- 3) Health-related quality of life (HR-QOL) will be determined by EuroQol instrument (EQ-5D).
- 4) Side effects such arrhythmias, hemodynamic changes and post epidural headache will be registered and recorded as absent or present.
- 5) Length of hospital stay will be calculated and expressed in number of days.

# **Study description**

### **Background summary**

Evidence is growing that inflammation plays an important role in cancer

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evolution. There is also growing appreciation that surgery, and the accompanying inflammatory stress response, might induce immunosuppression through which cancer cells are promoted to grow and metastasize. Although opioids are traditionally used to attenuate the surgical inflammatory stress response, there is also evidence that opioids might paradoxically induce further immunosuppression and thereby promote cancer growth. Neuraxial blockade has been shown to attenuate the stress response, thereby preserving immunity. Adjuvant loco-regional techniques, like for instance Transverse Abdominal Plane (TAP) blockade, are increasingly used to decrease the need for opioids and to preserve immunity as much as possible. However, in case of laparoscopic hysterectomy, there is lack of evidence indicating which adjuvant type of analgesia most effectively attenuates pain and the stress response. The aim of this study is to determine which anaesthetic technique (general anaesthesia in combination with TAP blockade versus general anaesthesia in combination with thoracic epidural analgesia offers the most benefits, with respect to attenuation of the surgical inflammatory stress response

### **Study objective**

Determine which anaesthetic technique (general anaesthesia in combination with TAP blockade versus general anaesthesia in combination with thoracic epidural analgesia) offers the most benefits, with respect to attenuation of the surgical inflammatory stress response, pain intensity and Health-related quality of life (HR-QOL).

## Study design

Prospective longitudinal study of six month for changes in cytokine concentrations before and after surgery.

## Study burden and risks

Not applicable

# **Contacts**

#### **Public**

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#### Scientific

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# **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

### Age

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

## Inclusion criteria

- \* Patients scheduled for elective laparoscopic hysterectomy, laparoscopic staging procedures, laparoscopic radical hysterectomy.
- \* Adult patients (older than 18 years of age)
- \* Written informed consent
- \* Understanding of Dutch or English language

### **Exclusion criteria**

- \* Non-elective surgery
- \* Any contraindication to neuraxial blockade (including coagulopathy, abnormal anatomy)
- \* Allergy to amide-linked local anaesthetics, especially bupivacaine
- \* Known psychiatric disorder
- \* Chronic pain patients or patients already using morphine pre-operatively

# Study design

# **Design**

Study type: Observational non invasive

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Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

## Recruitment

NL

Recruitment status: Will not start

Enrollment: 30

Type: Anticipated

# **Ethics review**

Not approved

Date: 07-03-2016

Application type: First submission

Review commission: PTC Stichting het Nederlands Kanker Instituut - Antoni van

Leeuwenhoekziekenhuis (Amsterdam)

# **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 NL55841.031.16