# Transluminal Endoscopic step-up approach versus miNimally invasive Surgical step-up apprOach in patients with infected pancreatic Necrosis: TENSION, a randomized controlled parallel-group superiority multicenter trial. Dutch Pancreatitis Study Group.

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To determine the effectiveness and, subsequently, the cost-effectiveness of a endoscopic transluminal step-up approach (ETD & ETN) versus a surgical step-up approach (PCD & VARD, if not possible laparotomy) to improve clinical outcome in...

Ethical review -

**Status** Recruitment stopped **Health condition type** Gastrointestinal infections

Study type Interventional

# **Summary**

#### ID

NL-OMON38023

#### Source

ToetsingOnline

**Brief title** TENSION

#### Condition

- Gastrointestinal infections
- Bacterial infectious disorders
- Gastrointestinal therapeutic procedures

### **Synonym**

infected necrotizing pancreatitis, Pancreatitis

## Research involving

Human

# **Sponsors and support**

Primary sponsor: Universitair Medisch Centrum Sint Radboud

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

## Intervention

**Keyword:** infection, intervention, necrosis, pancreatitis

## **Outcome measures**

# **Primary outcome**

The primary endpoint is composite of mortality and major morbidity. Major morbidity is defined as new onset organ failure (cardiac, pulmonary or renal), bleeding requiring intervention, perforation of a visceral organ (except for the stomach in ETN) requiring intervention, enterocutaneous fistula requiring intervention and incisional hernia (including burst abdomen).

## **Secondary outcome**

Secondary endpoints are the individual components of the primary endpoint, other morbidity such as pancreaticocutaneous fistula, exocrine and/or endocrine pancreatic insufficiency, development of additional fluid collections requiring intervention, biliairy strictures, wound infections, the need for necrosectomy (either endoscopically or surgically), the total number of surgical, endoscopic or radiological (re-) interventions, total length of intensive care- and hospital stay, quality of life, costs per patient with poor outcome, costs per OALY, total direct and indirect medical costs and the total number of

cross-over between groups.

Other research questions:

Is endoscopic transluminal catheter drainage (ETD) equally effective as

percutaneous catheter drainage (PCD) in preventing necrosectomy?

# **Study description**

## **Background summary**

Infected necrotising pancreatitis is a dangerous, potentially lethal disease, that requires intervention. It is associated with prolonged hospital stay and high costs. It has been shown that catheter drainage is the optimal first step in the treatment of infected necrosis. Recent literature suggests that the endoscopic transluminal step-up approach (endoscopic transluminal catheter drainage (ETD) and necrosectomy (ETN) as the second step), may further improve outcome (risk of mortality and major morbidity) compared to the surgical step-up approach (consisting of percutaneous catheter drainage (PCD) and surgical necrosectomy (VARD, if not possible laparotomy) as the second step).

## Study objective

To determine the effectiveness and, subsequently, the cost-effectiveness of a endoscopic transluminal step-up approach (ETD & ETN) versus a surgical step-up approach (PCD & VARD ,if not possible laparotomy) to improve clinical outcome in patients with (suspected or confirmed) infected necrotizing pancreatitis.

# Study design

Randomized controlled, parallel group superiority multicenter trial with a follow-up of 6 months after randomisation for the primary endpoint, secondary endpoint and the other research questions.

#### Intervention

Endoscopic transluminal step-up approach (ETD and ETN).

## Study burden and risks

In the endoscopic transluminal step-up approach group, the patient will initially be drained endoscopically transluminally. If the patient does not show clinical improvement within 72 hours, endoscopic transluminal necrosectomy will take place. The study entails little additional risks. The endoscopic transluminal step-up approach is already enrolled in many centers around the world and published literature shows that it is a safe technique that, compared to the surgical step-up approach is associated with few complications. Both approaches are applied only by experienced specialists in experienced centers.

# **Contacts**

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# **Trial sites**

# **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

## Inclusion criteria

- \* Pancreatic necrosis and/or peripancreatic necrosis with (suspected or confirmed) infection. (See protocol, page 15-16 for definitions)
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- \* The peripancreatic collection is amenable to the endoscopic transluminal step-up approach as well as the surgical step-up approach.
- \* Age \* 18 years and informed consent.

## **Exclusion criteria**

- \* Previous surgical, endoscopic or percutaneous intervention for pancreatic necrosis and/or peripancreatic necrosis and/or peripancreatic collections. (See protocol, page 16 for definition)
- \* Acute flare up of chronic pancreatitis.
- \* Concomitant indication for laparotomy because of suspected abdominal compartment syndrome, bleeding or perforation of a visceral organ.

# Study design

# **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 20-09-2011

Enrollment: 98

Type: Actual

# **Ethics review**

Approved WMO

Date: 10-08-2012

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 15-08-2012

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 23-08-2012

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 08-03-2013

Application type: Amendment

Review commission: METC Amsterdam UMC

# **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 NL33422.018.10