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Early Surgery versus optimal Current step-up prActice for chronic PancrEatitis (ESCAPE)

Submission date
04/03/2011

Recruitment status
No longer recruiting

Registration date
25/03/2011

Overall study status
Completed

Last Edited
22/01/2020

Condition category
Digestive System

[X] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Chronic pancreatitis (CP) is a condition where the pancreas becomes permanently damaged from inflammation, causing severe pain. Surgery is kept as a last resort when other treatments have failed and the severity of disease has increased substantially and pain becomes unmanageable. Small studies have suggested that early surgery may be beneficial in terms of pain relief and pancreatic function. The aim of this study is to evaluate the benefits, risks and costs of early surgery as an alternative to current practice for CP.

Who can participate?
Patients with CP being treated with opioid painkillers.

What does the study involve?
Participants are randomly allocated to either group A or group B. Group A undergo early surgical treatment, while group B follow the current step-up practice (medical management followed by endoscopic treatment followed by surgical treatment if not effective).

What are the possible benefits and risks of participating?
Every treatment has its risks for complications.

Where is the study run from?
Academic Medical Centre Amsterdam (Netherlands).

When is the study starting and how long is it expected to run for?
April 2011 to July 2017.

Who is funding the study?
1. Dutch Digestive Diseases Foundation (Netherlands)
2. ZonMw Health Care Efficiency Research Program (Netherlands)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
DDDF (Grant nr. WO10-21) and ZonMw (Grant nr. 171102016)

Study information

Scientific Title
Early Surgery versus optimal Current step-up prActice for chronic PancrEatitis (ESCAPE): a multi-centre randomised controlled trial

Acronym
ESCAPE

Study objectives
Early surgical intervention results in less pain over the study period and is more cost-effective than the optimal current step-up practice.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Medical Ethical Committee of the Academic Medical Centre in Amsterdam, 30/03/2011

Study design
Multi-centre strategy randomised controlled trial

Primary study design
Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied
Chronic pancreatitis

Interventions
Early surgical intervention:
Surgical drainage of the pancreatic duct (pancreaticojejunostomy) if pancreatic head is not enlarged (< 4 cm) or surgical drainage of the pancreatic duct and resection of the head of the pancreas (Frey procedure) if pancreatic head is enlarged (4cm)

Control group: Optimal current step-up practice
1. Step 1 - Optimal medical management, if not effective followed by
2. Step 2 -Endoscopic intervention, and if not effective followed by
3. Step 3 - Surgical intervention

The patient follow-up will be completed 18 months after randomisation for the primary endpoint, the secondary endpoints and the other research questions.

Intervention Type
Procedure/Surgery

Primary outcome(s)
The primary clinical outcome is the degree of pain as assessed by the Izbicki pain score at 2 weeks intervals during the follow-up period of 18 months

Key secondary outcome(s))
1. Cost-effectiveness, total direct and indirect costs-during 18 months follow-up period
2. Severe complications related to disease progression or endoscopic and surgical interventions
2.1. Mortality (all-cause)
2.2. Disease progression: development of pseudocysts, pancreatic insufficiency (endocrine or exocrine), gastric outlet or duodenal obstruction, chronic use of opioids (defined as need for opioids for a period > 6 months), hospital admissions for CP upflares
2.3. Endoscopic intervention: (acute) pancreatitis flare up, cholangitis, acute cholecystitis, retroperitioneal or bowel perforation, abdominal sepsis, intra-abdominal abscesses needing intervention, bleeding needing transfusion or intervention, any relaparotomy for other reasons
2.4. Surgical intervention: anastomotic leakage, bleeding needing transfusion or intervention, abdominal sepsis, intra-abdominal abscesses needing intervention, burst abdomen, severe wound infection (requiring prolonged hospital stay), any relaparotomy for other reasons
3. Quality of life-assessed by validated questionnaires.
4. Izbicki score at 18 months follow-up
5. Endocrine pancreatic insufficiency-determined by use of anti-diabetic medication or abnormal serum glucose levels (fasting serum glucose levels > 6,0 mmol/L in capillary blood or > 6,9 mmol /L in venous plasma at two different days
6. Exocrine pancreatic insufficiency-determined by fecal elastase levels (< 200µg/g)
7. Additional pain measurements-due to the heterogeneity in reporting of pain in previous trials and in order for the results of this trial to be comparable with other important trials in literature, the following additional measures of pain will be reported as well:
7.1. Proportion of patients with complete and partial pain relief at end of follow-up, defined as follows:
7.1.1. Complete pain relief: an Izbicki pain score = 10 points

7.1.2. Partial pain relief: a decrease of >50% from baseline in the Izbicki score with a final score >10 points
7.2. Visual analogue score (VAS) for pain: measured as part of the Izbicki score
7.3. Büchler pain score: alternative pain measure based on the Izbicki questionnaire, and calculated by the multiplication of two of the four items of the Izbicki questionnaire (i.e. pain frequency and pain intensity)
8. Number and duration of hospital admissions during study period-Total number of hospital admission during 18 months of follow-up period and days outside the hospital in 18 months of follow-up
9. Number of performed interventions-total number of endoscopic and surgical interventions, including initial intervention.
10. Number of pancreatitis flare ups during study period-total number during 18 months follow-up period documented by computed tomography (CT) or magnetic resonance imaging (MRI)

Completion date
01/07/2017

Eligibility

Key inclusion criteria
Registration criteria:
1. Age 18 years
2. Confirmed chronic pancreatitis: according to the M-ANNHEIM diagnostic criteria
3. Dilated pancreatic duct [5 mm, established by magnetic resonance cholangiopancreatography (MRCP), Computerised Tomography (CT) or Endoscopic ultrasound (EUS)], with or without enlargement of the pancreatic head
4. Presence of moderate, non-debilitating pain. This will be defined as chronic abdominal pain (present for at least 3 months) sufficiently relieved with non-opioid analgesics

Randomisation criteria (after fulfilling inclusion criteria for registration):
1. Need for upgrade from non-opioids to opioid analgesics: newly developed need for opioids analgesics (opioids needed at least 3 days per week) and persistently needed for at least 2 weeks in a row
2. Informed consent for randomisation

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
All

Total final enrolment

Key exclusion criteria
1. History of prolonged need of opioids for chronic pancreatitis for a period over 2 months in the last 2 years
2. Previous pancreatic surgery
3. Previous endoscopic dilatation or stenting of the pancreatic duct
4. Episode of biliary obstruction in the last 2 months (defined as jaundice or bilirubine levels 25 micromol / L) or the presence of a stent in the common bile duct (CBD)
5. Proven autoimmune pancreatitis (including elevated levels of gamma-globulins (IgG))
6. Suspected or established pancreatic malignancies
7. Life expectancy of < 1 year for any reason
8. Presence of duodenal obstruction necessitating surgery, as judged by the expert panel
9. Presence of a pseudocyst larger than 6 cm necessitating intervention, as judged by the expert panel
10. Contra-indications for surgery, always evaluated by the expert panel (e.g. American Society of Anesthesiology class IV, severe portal hypertension due to occluded portal vein)
11. Pregnancy

Date of first enrolment
01/04/2011

Date of final enrolment
01/07/2017

Locations

Countries of recruitment
Netherlands

Study participating centre
Academic Medical Center Amsterdam
Amsterdam
Netherlands
1100 DD

Sponsor information

Organisation
Academic Medical Centre Amsterdam (Netherlands)

Funder(s)

Funder type

Government

Funder Name
Dutch Digestive Diseases Foundation (Netherlands) (ref: Grant nr. WO10-21)

Funder Name
ZonMw Health Care Efficiency Research Program (Netherlands) (ref: Grant nr. 171102016)

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?
Results article	results	21/01/2020	22/01/2020	Yes	No
Protocol article	protocol	18/03/2013		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes