# How long to wait before operating on the gall bladder after gallstone-induced acute pancreatitis?

Submission date	Recruitment status	[X] Prospectively registered
29/10/2018	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
20/11/2018	Completed	Results
Last Edited	Condition category	Individual participant data
14/11/2019	Digestive System	[] Record updated in last year

#### Plain English summary of protocol

Background and study aims

Acute pancreatitis is a sudden inflammation of the pancreas (an organ near the stomach that produces substances that aid digestion and regulate blood sugar levels). In most cases, this inflammation is caused by gallstones, in which cases the solution is to remove the gall bladder as soon as possible, where these stones are produced. Without gall bladder removal after recovery from pancreatitis, several complications may occur, including repeated acute pancreatitis, inflammation of the gall bladder, blockage or inflammation of the bile ducts, biliary colic (sudden pain). However, in some cases, removing the gall bladder as soon as possible can be difficult and may lead to complications. A technique called ERCP, which clears the bile ducts, can avoid these complications.

The aim of the EMILY trial is to combine a surgical treatment (removal of gall bladder) and a gastroenterological procedure (ERCP) to investigate if ERCP with delayed surgical treatment (45 to 60 days after discharge) compared with ERCP with early surgical treatment (within 6 days after discharge) could reduce repeated biliary events.

Who can participate?

Adults with mild gallstone-induced pancreatitis

What does the study involve?

Participants will be randomly allocated to one of two groups, group A or group B. Both groups will have their gall bladder removed, as suggested by international practice; however, the timing will differ between the two groups.

Group A is the early group and removal of the gall bladder will be performed 6 days after discharge.

Group B is the delayed group and the removal of the gall bladder will be carried out within 45-60 days after discharge.

Participants will be asked about any gallstone-related events using questionnaires during the follow-up period.

What are the possible benefits and risks of participating?

The benefit of participating is that participants will have the security and confidence that the operation will be performed on time (within 6 days or 45-60 days after discharge). This operation is routinely performed 30 minutes last procedure; however, the waiting lists can last for up to half a year. In this study, there will be no waiting list or delays. Patients will receive attention and follow-up from health care personnel that is sadly not always ensured in regular healthcare. The possible risk for participants in group A (early removal of gall bladder) is that the procedure may be difficult and there may be complications due to previous inflammation.

For participants in group B (delayed removal of gall bladder), there may be a higher risk for recurrent AP. However, ERCP is performed to lower this risk. If recurrent AP does develop, then participants can return to the hospital for immediate surgery.

The ERCP procedure should prevent any significant differences between groups A and B.

Where is the study run from?

University of Pécs Medical School Institute of Translational Medicine (Hungary)

When is the study starting and how long is it expected to run for? June 2018 to May 2025 (updated 14/11/2019, previously: May 2020)

Who is funding the study? University of Pécs Medical School (Hungary)

Who is the main contact?

Professor Péter Hegyi, Head of the Institute of Translational Medicine University of Pécs Medical School

hegyi.peter@pte.hu

#### Study website

https://tm-centre.org

# Contact information

## Type(s)

Scientific

#### Contact name

Prof Péter Hegyi

#### **ORCID ID**

http://orcid.org/0000-0003-0399-7259

#### Contact details

Szigeti str. 12. Pécs Hungary H-7624 +36 72 536250 hegyi.peter@pte.hu

# Additional identifiers

#### **EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

#### Secondary identifying numbers

V1

# Study information

#### Scientific Title

EMILY: Endoscopic sphincterotoMy for delayIng choLecYstectomy in mild acute biliary pancreatitis

#### Acronym

**EMILY** 

#### **Study objectives**

Cholecystectomy on admission after acute pancreatitis (AP) is difficult sometimes and may be risky to some patients. However, if the operation is delayed, the risk of recurrent AP increases. Gastroenterologists and surgeons have to decide whether to operate on patients upon admission, or to delay the surgery.

We hypothesize that carrying out an ERCP/ES allows us to delay cholecystectomy without increasing the risk for recurrent pancreatitis, thus making it logistically easier to perform and potentially increasing the efficacy and safety of the procedure.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Ministry of Human Capacities, Chief Medical Officer of State, 18/04/2018, 11861-9/2018/EÜIG

# Study design

Interventional prospective multi-centre randomised controlled trial

# Primary study design

Observational

# Secondary study design

Case-control study

# Study setting(s)

Hospital

# Study type(s)

Treatment

# Participant information sheet

No available in web format, please use contact details to request a participant information sheet.

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

Mild biliary pancreatitis

#### **Interventions**

Participants will be randomised by the study coordinator using a randomisation module with sealed envelope. This randomisation module will allocate the participants to the 2 different groups. Allocation will be carried out based on predefined randomisation lists created separately for each recruiting centre. The allocation sequence will be prepared with a block size of 4 and with an allocation ratio 1:1 by the Independent Data Management Board (IDMB). This method makes it impossible for researchers to predict the allocation of the patients involved in the study. It is impossible to conceal the distribution of the patients in this study because the patients need to be scheduled for either an early cholecystectomy or a delayed cholecystectomy.

The patients are randomized to 2 groups:

- 1. Early cholecystectomy (within 6 days after discharge)
- 2. Delayed (interval) cholecystectomy (45-60 days after discharge)

There will be a follow-up 90 days after discharge

#### Intervention Type

Procedure/Surgery

#### Primary outcome measure

Composite endpoint, which is based on mortality and on the following recurrent biliary events:

- 1. Recurrent acute biliary pancreatitis (ABP)
- 2. Acute cholecystitis
- 3. Uncomplicated biliary colic
- 4. Cholangitis

This will be evaluated using yes/no questions as part of a questionnaire up to 90 days after discharge. Patients will be asked to note every biliary event using questionnaires during the 3 month follow-up observational period following discharge.

#### Secondary outcome measures

The following are assessed using questionnaires and evaluation of medical records 90 days after discharge:

- 1. Number of biliary colics for each patient
- 2. Difficult of cholecystectomy
- 3. Rate of conversion to cholecystectomy
- 4. Total length of hospital stay
- 5. Need for ICU admission and total length of ICU stay
- 6. Organ failure
- 7. Biliary leakage

#### Overall study start date

01/06/2018

#### Completion date

31/05/2025

# **Eligibility**

#### Key inclusion criteria

- 1. Aged 18 years or older
- 2. Diagnosis of acute pancreatitis, with at least 2 of the following symptoms:
- 2.1. Upper abdominal pain
- 2.2. Serum lipase three times higher than the upper limit of normal and characteristic findings for acute pancreatitis on imaging
- 2.3. Serum amylase three times higher than the upper limit of normal and characteristic findings for acute pancreatitis on imaging
- 3. Mild biliary pancreatitis (no pancreatic necrosis, no transient or persistent organ failure (>48 hours)) according to the revised Atlanta classification
- 4. Any of the following 3 definitions of biliary pancreatitis:
- 4.1. Diagnosis of gallstones or sludge on imaging
- 4.2. Dilated common bile duct on ultrasound (>8 mm in patients aged 75 years old and under, or >10 mm in patients over 75 years old) with the absence of gallstones or sludge in the gallbladder
- 4.3. Alanine aminotransferase level >2 times higher than normal values, with alanine aminotransferase levels greater than aspartate aminotransferase levels
- 5. ERCP/ES either during the index admission or in the medical history without complication (added 01/02/2019)
- 6. Signed written informed consent

#### Participant type(s)

Patient

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

Both

#### Target number of participants

89

#### Key exclusion criteria

- 1. Poor physical status
- 2. American Society of Anesthesiologists (ASA) class III in patients over 75 years old
- 3. ASA class IV or V in patients 75 years old or younger
- 4. Continuous alcohol abuse
- 5. Chronic pancreatitis
- 6. Pregnancy
- 7. Previous sphincterotomy (removed 01/02/2019)
- 8. Previous cholecystectomy

#### Date of first enrolment

01/03/2019

#### Date of final enrolment

31/10/2024

# Locations

#### Countries of recruitment

Hungary

Romania

# Study participating centre University of Pecs Medical School Institute for Translational Medicine Szigeti str 12.

Pécs

Hungary

H-7624

# Study participating centre University of Szeged, 1st Department of Medicine

Korányi fasor 8-10. Szeged Hungary H-6720

# Study participating centre University of Debrecen

Egyetem tér 1. Debrecen Hungary H-4032

## Study participating centre Iuliu Haţieganu University of Medicine and Pharmacy Cluj-Napoca

Victor Babeș 8 Cluj-Napoca Romania 400000

# Study participating centre University of Medicine and Pharmacy of Targu Mures

Gheorghe Marinescu 38 Targu Mures Romania 540139

# Sponsor information

#### Organisation

University of Pécs

#### Sponsor details

Szigeti str. 12. Pécs Hungary H-7624 +36 72 536 250 hegyi.peter@pte.hu

#### Sponsor type

University/education

#### Website

http://aok.pte.hu

#### Organisation

Hungarian Academy of Sciences, Momentum Grant

#### Sponsor details

Nádor str 7. Budapest Hungary H-1051 +36 72 536 250 hegyi.peter@pte.hu

#### Sponsor type

Research organisation

#### Organisation

GINOP 2.3.2.-15 'Stay Alive'

#### Sponsor details

Stigeti str 12 Pécs Hungary H-7624 +36 72 536 250 hegyi.peter@aok.pte.hu

#### Sponsor type

Research organisation

#### Organisation

University of Pecs

#### Sponsor details

#### Sponsor type

Not defined

#### Website

http://pte.hu/english

#### **ROR**

https://ror.org/037b5pv06

# Funder(s)

#### Funder type

University/education

#### Funder Name

Általános Orvostudományi Kar, Pécsi Tudományegyetem

## Alternative Name(s)

Medizinische Fakultät, Universität Pécs, PTE Általános Orvostudományi Kar, Medizinische Fakultät, Universität Pécs, Medical School, University of Pécs, ÁOK, PTE, UP MS, PTE ÁOK

# **Funding Body Type**

Government organisation

# Funding Body Subtype

Local government

#### Location

Hungary

# **Results and Publications**

#### Publication and dissemination plan

We plan to publish the results in a Q1 High-quality international journal.

# Intention to publish date

31/12/2025

# Individual participant data (IPD) sharing plan

The data from this study is available upon request from the principal investigators (Dezső Kelemen MD, PhD, University of Pécs, Medical School, kelemende@gmail.com and Levente-Pal Kucserik MD, UMF Targu Mures, k.levente.p@gmail.com). The questionnaires, the eCFR (raw data) and the analyzed data can be available for other laboratories by reasonable request.

# IPD sharing plan summary

Available on request