Preventive pancreatic stents in the management of acute biliary pancreatitis

Submission date	Recruitment status	[X] Prospectively registered	
13/11/2014 Registration date	Suspended Overall study status	[X] Protocol	
		Statistical analysis plan	
09/12/2014 Last Edited	Completed Condition category	☐ Results	
		Individual participant data	
04/05/2020	Digestive System	Record updated in last year	

Plain English summary of protocol

Background and study aims

Acute inflammation of the pancreas (acute pancreatitis) can be a severe or even life-threatening disease. Gallstones are the most common cause, which is called acute biliary pancreatitis (ABP). If you have co-existing infection and inflammation of the biliary tree (acute cholangitis) and/or persistent biliary obstruction (cholestasis), an endoscopic procedure (called ERCP) is beneficial which includes clearance of the biliary tree. Severe complications occur in 10-20% of all cases despite endoscopic treatment, probably because the opening of the pancreatic duct is simultaneously obstructed. Theoretically when we temporarily place a small plastic tube (a preventive pancreatic stent or PPS) into the pancreatic duct, it keeps it open until the inflammation resolves and the risk of pancreatic duct obstruction diminishes. Our goal is to show the positive effect of PPS placement added to the standard endoscopic therapy. The study findings should help to optimize the treatment of this severe disease.

Who can participate?

Patients aged 18 or over with cholangitis and/or cholestasis.

What does the study involve?

Participants will be randomly allocated to receive either the standard endoscopic treatment or PPS placement added to the standard treatment. Every patient will be hospitalized and receive similar medical treatment. Clinical and laboratory data will be collected for outcome measures.

What are the possible benefits and risks of participating?

Patients who receive PPSs may have better overall outcome and quicker symptom resolution compared to the standard treatment. The main risk of placing a PPS is unsuccessful placement which might cause an even worse outcome; therefore only very experienced endoscopists are involved in this study.

Where is the study run from?

The PREPAST study is set up by the Hungarian Pancreatic Study Group in Szeged, Hungary. All procedures will be performed at the participating medical centers.

When is the study starting and how long is expected to run for? It is anticipated that recruitment will start in early 2015. Based on our preliminary calculations the total target number of participants will be enrolled over a 4-year period; however, if more centers join in the study it will be shorter.

Who is funding the study? The Hungarian Pancreatic Study Group (HPSG).

Who is the main contact? Zsolt Dubravcsik MD dubravcsikzs@gmail.com Professor Péter Hegyi MD, PhD, hegyi2009@gmail.com

Contact information

Type(s)

Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

PREPAST

Study information

Scientific Title

Preventive pancreatic stents in the management of acute biliary pancreatitis: PREPAST, a prospective multicenter randomized controlled trial (Hungarian Pancreatic Study Group)

Acronym

PREPAST

Study objectives

We hypothesise that placement of a preventive pancreatic stent (PPS) at the course of early endoscopic retrograde cholangiopancreatography (ERCP), endoscopic sphincterotomy (ES) and stone extraction reduces morbidity and mortality in acute biliary pancreatitis (ABP) patients with cholangitis and/or cholestasis compared to the standard of care ERCP, ES and stone extraction.

Ethics approval required

Old ethics approval format

Ethics approval(s)

National Medical Ethics Committee, Hungary, 13/10/2014, ref.: ETT TUKEB 030174/2014/OTIG

Study design

Prospective randomized controlled multicenter trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Acute biliary pancreatitis (ABP)

Interventions

Patients with ABP and co-existing acute cholangitis will recieve early endoscopic intervention (group A). Patients in group A will be randomized either into group A1 (ERCP, ES treatment) or into group A2 (ERCP, ES + PPS treatment). Patients with ABP but without evidence of acute cholangitis will be assessed for evidence of cholestasis. Patients without co-existing acute cholangitis but evidence of cholestasis will be randomized to receive conservative treatment or early ERCP, ES and bile duct clearance or early ERCP, ES, bile duct clearance plus PPS insertion (group B). Patients receiving conservative treatment will be assessed at 24 hours after randomization (no later than 72 hours from the onset of pain) for clinical and laboratory signs of persistent cholestasis. If this is present patients will recieve ERCP, ES and bile duct clearance and their data will be collected separately. Patients in group B will be randomized either into group B0 (conservative treatment), into group B1 (ERCP, ES treatment) or into group B2 (ERCP, ES + PPS treatment). Patients without signs of cholestasis (and acute cholangitis) will receive conservative treatment (group C), and will not be randomized.

Intervention Type

Procedure/Surgery

Primary outcome measure

Composite of mortality and major morbidity (described as a complicated course of ABP). A complicated course is described as any of the following three:

- 1. Moderate and severe acute pancreatitis (including temporary and persistent organ failure)
- 2. Any complications including systemic (exacerbation of pre-existing co-morbidity) and all local complications (acute peripancreatic fluid collection without tendency of spontaneous resolution, pancreatic pseudocyst, acute necrotic collection, walled-off necrosis) of AP as described in the revised Atlanta classification
- 3. Mortality

Secondary outcome measures

Secondary endpoints related to ABP outcome:

- 1. Multi-organ failure in each subgroup
- 2. Mortality rate in each subgroup
- 3. Pain score on admission, 24 and 72 hours after ERCP (or after randomization in group B1 conservative treatment group)
- 4. New onset of sepsis
- 5. The proportion of patients with severe course of ABP
- 6. The proportion of patients with severe organ failure requiring respiratory support (mechanical ventilation) and/or cardiac support (vasopressors) and/or renal support (haemodialysis)

Secondary endpoints related to endoscopic treatment:

- 1. PPS insertion success rate
- 2. Consequences of attempted but failed pancreatic stenting (this subgroup will be analyzed separately)
- 3. Endoscopists experience on PPS success rate and ABP outcome
- 4. The influence of the endoscopic technique used on the outcome of ABP
- 5. Influence of patient and procedure related risk factors of post-ERCP pancreatitis (published by the European Society of Gastrointestinal Endoscopy ESGE) on the outcome of ABP patients who underwent ERCP and on the success rate of PPS insertion

Overall study start date

01/01/2015

Completion date

31/08/2022

Eligibility

Key inclusion criteria

- 1. Age \geq 18 years (either sex)
- 2. Diagnosis of acute biliary pancreatitis
- 3. Written informed consent
- 4. Possibility of performing ERCP within 48 hours calculated from the onset of pain

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

230

Key exclusion criteria

- 1. Pregnancy
- 2. Acute pancreatitis due to alcohol, hyperlipidaemia, malignancy or post-ERCP pancreatitis
- 3. Pain onset >48 hours
- 4. Abscence of abdominal pain (the onset cannot be assessed)
- 5. Liver cirrhosis Child score C
- 6. Pancreatic fluid collections or necrosis on initial imaging at presentation
- 7. INR>1.6 and uncorrectable by the time of ERCP
- 8. Previous endoscopic sphincterotomy

Date of first enrolment

01/01/2015

Date of final enrolment

31/12/2021

Locations

Countries of recruitment

Hungary

Study participating centre

University of Szeged

1st Department of Internal Medicine Dugonics Ter 13 Szeged Hungary 6720

Study participating centre County Hospital

Department of Gatsroenterology Nyiri ut 38. Kecskemet Hungary 6000

Study participating centre University of Pecs

1st. Department of Internal Medicine Ifjusag ut 13. Pecs Hungary 7624

Study participating centre National Health Center

Department of Gastroenterology Podmaniczky u. 111. Budapest Hungary 1062

Sponsor information

Organisation

Hungarian Pancreatic Study Group (HPSG) (Hungary)

Sponsor details

Korányi fasor 8-10 Szeged Hungary 6720

Sponsor type

Research organisation

Website

http://www.pancreas.hu

Funder(s)

Funder type

Research organisation

Funder Name

Hungarian Pancreatic Study Group (HPSG) (Hungary)

Funder Name

European Social Fund

Alternative Name(s)

Европейският социален фонд, Evropský sociální fond, Den Europæiske Socialfond, Europäischer Sozialfonds, Europa Sotsiaalfond, Eupωπαϊκό Κοινωνικό Ταμείο, Fondo Social Europeo, Fonds social européen, Europski socijalni fond, Fondo sociale europeO, Eiropas Sociālais fonds, Europos socialinis fondas, Európai Szociális Alap, Fond Soċjali Ewropew, Europees Sociaal FondS, Europejski Fundusz Społeczny, Fundo Social Europeu, Fondul Social European, Európsky sociálny fond, Evropski socialni sklad, Euroopan sosiaalirahasto, Europeiska socialfonden, European Social Fund, Fondo Social Europeo Plus, Европейски социален фонд плюс, Evropský sociální fond plus, Europæiske Socialfond Plus, Europäische Sozialfonds+, Euroopa Sotsiaalfond+, Ευρωπαϊκό Κοινωνικό Ταμείο+, Fonds social européen+, Europski socijalni fond plus, Fondo sociale europeo Plus, Eiropas Sociālais fonds Plus, Europos socialinis fondas +, Európai Szociális Alap Plusz, Europees Sociaal Fonds Plus, Europejski Fundusz Społeczny Plus, Fundo Social Europeu Mais, Fondul social european Plus, Európsky sociálny fond +, Evropski socialni sklad +, Euroopan sosiaalirahasto plus, Europeiska socialfonden+, ESF, ECΦ, EKT, FSE, ESZA, EFS, ESS, ESR, ESF+, ESZA+, EFS+, FSE+, ESS+, ESR+

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Funder Name

European Union

Results and Publications

Publication and dissemination plan

We would like to publish our trial protocol once the registration has been confirmed (the trial article has been prepared). We would like to publish our results at the end of the trial.

Intention to publish date 31/01/2023

Individual participant data (IPD) sharing plan

IPD sharing plan summary Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	01/03/2015		Yes	No