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Implementation study of an evidence-based management algorithm for chronic pancreatitis patients

Submission date 01/09/2020	**Recruitment status** No longer recruiting	[X] Prospectively registered [X] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [_] Record updated in last year
Registration date 05/09/2020	**Overall study status** Completed	
Last Edited 09/01/2023	**Condition category** Digestive System	

Plain English summary of protocol

Background and study aims
Chronic pancreatitis is a condition where the pancreas has become permanently damaged from inflammation and stops working properly. The pancreas is a small organ, located behind the stomach, that helps with digestion. Chronic pancreatitis can affect people of any age, but it usually develops between the ages of 30 and 40 as a result of heavy drinking over many years. It's more common in men.
Chronic pancreatitis is associated with a markedly reduced life expectancy and quality of life. In a recently performed study, current care for patients with chronic pancreatitis in the Netherlands proved not to be in accordance with the in 2017 published European guideline.
The aim of the present study is to assess whether standardized care through the implementation of an evidence-based management 'algorithm' of interventions for patients with chronic pancreatitis results in an improvement in quality of life and reduction of pain severity as compared to current practice.

Who can participate?
Chronic pancreatitis patients who meet the inclusion and exclusion criteria and are receiving active treatment in one of the participating centers of the Dutch Pancreatitis Study Group.

What does the study involve?
All participating hospitals cross over from current practice, to care according to the treatment algorithm. The sequence of crossing over is randomized. Study participants will be enrolled during the current practice phase and be followed until the end of the study. In the end, this evidence-based management algorithm will be implemented in all participating hospitals. The evidence-based management algorithm consists of a combination of interventions, based on the recommendation of the United European Gastroenterology evidence-based guidelines will be compared with care according to current practice.

What are the possible benefits and risks of participating?
There are no additional/potential risks for participating in this trial. Possible benefits: During the intervention phase all participating patients will be treated according to our standardized evidence-based management algorithm.

Where is the study run from?
Dutch Pancreatitis Study Group, St. Antonius Hospital (The Netherlands)

When is the study starting and how long is it expected to run for?
July 2020 to July 2023

Who is funding the study?
Mylan (The Netherlands)

Who is the main contact?
Prof. dr. M. Bruno, m.bruno@erasmusmc.nl
Dr. F.E.M. de Rijk , f.de.rijk@antoniusziekenhuis.nl

Study website
https://combo-studie.nl/

Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number
Nil known

IRAS number

ClinicalTrials.gov number
Nil known

Secondary identifying numbers
NL8556

Study information

Scientific Title
Implementation study of an evidence-based management algorithm for patients with chronic pancreatitis: a nationwide stepped-wedge cluster randomized controlled trial (COMBO trial)

Acronym
COMBO

Study objectives
The aim of this study is to investigate whether the implementation of an evidence-based management algorithm consisting of a combination of interventions for the management of chronic pancreatitis (CP) results in an improvement of patient outcomes.

Ethics approval required
Old ethics approval format

Ethics approval(s)
On 21/04/2020 the MEC-U (Medical Research Ethics Committees United; Postbus 2500, 3430 EM Nieuwegein, Koekoekslaan 1, Netherlands; +31 (0)88 3208784; info@mec-u.nl) ruled that this study is not subject to the Medical Research Involving Human Subjects Act (WMO), ref: W20.074

Study design
Nationwide stepped-wedge cluster randomized controlled trial

Primary study design
Interventional

Secondary study design
Stepped-wedge cluster randomized controlled trial

Study setting(s)
Hospital

Study type(s)
Treatment

Participant information sheet
https://combo-studie.nl/ (in Dutch)

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

Interventions
All participating hospitals cross over from current practice to care according to the treatment algorithm. The sequence of crossing over is randomized. Study participants will be enrolled during the current practice phase and be followed longitudinally until the end of the study. In the end, this evidence-based management algorithm will be implemented in all participating hospitals.

The evidence-based management algorithm consists of a combination of interventions, all considered as part of best practice, based on the recommendations of the United European Gastroenterology evidence-based guidelines for the diagnosis and therapy of chronic pancreatitis (2017) and extensive systematic literature analysis. The interventions included in this algorithm are particularly focused on education of both physicians and patients, management of risk factors for disease progression and regular screening for and treatment of complications of chronic pancreatitis. The final algorithm has been critically reviewed by the advisory committee of international experts in the field of chronic pancreatitis before implementation in this trial.

Follow up will be 18 months after the start of the intervention.

Intervention Type
Other

Primary outcome measure
1. Quality of life measured using PANQOLI-questionnaire and EQ5D questionnaire at baseline, start of intervention and 1 year after start of intervention
2. Pain measured using Izbicki questionnaire at baseline, start of intervention and 12 months after start of intervention

Secondary outcome measures
1. Individual clinical outcomes measured using data from medical records combined with data from questionnaires at start of intervention and 12 months after start of intervention
2. Risk factors for disease progression measured using data from medical records combined with data from questionnaires at start of intervention and 12 months after start of intervention
3. Healthcare resource utilization measured using data from medical records combined with data from questionnaires at start of intervention and 12 months after start of intervention
4. Social participation measured using data from medical records combined with data from questionnaires at start of intervention and 12 months after start of intervention
5. Annual costs measured using data from medical records combined with data from questionnaires at start of intervention and 12 months after start of intervention

Overall study start date
02/07/2020

Completion date
31/07/2023

Eligibility

Key inclusion criteria
1. Age ≥18 years
2. A diagnosis of CP according to the M-ANNHEIM criteria
3. Active treatment in one of the participating hospitals
4. Provided written informed consent (IC)

Participant type(s)
Patient

Age group

Adult

Lower age limit
18 Years

Sex
Both

Target number of participants
120 CP patients with a time since diagnosis ≤3 years

Key exclusion criteria
1. Women who are pregnant
2. End-stage diseases (<6 months estimated survival) due to cancer, chronic obstructive pulmonary disease and/or congestive heart failure
3. Suspected or established pancreatic malignancies
4. Uncompensated cirrhosis
5. Renal failure (GFR <25 ml/min or who are on dialysis)

Date of first enrolment
07/09/2020

Date of final enrolment
31/12/2022

Locations

Countries of recruitment
Netherlands

Study participating centre
Amsterdam UMC, locatie AMC
Meibergdreef 9
Amsterdam
Netherlands
1105 AZ

Study participating centre
Amsterdam AMC, locatie VUMC
De Boelelaan 1117, 1118
Amsterdam
Netherlands
1081 HV

Study participating centre

Amphia Ziekenhuis
Langendijk 75
Breda
Netherlands
4819 EV

Study participating centre
St. Antonius Ziekenhuis
Netherlands
3435 CM

Study participating centre
Bravis Ziekenhuis
Netherlands
4708 AE

Study participating centre
Catharina Ziekenhuis
Netherlands
5623 EJ

Study participating centre
Canisius Wilhelmina Ziekenhuis
Netherlands
6532 SZ

Study participating centre
Erasmus MC
Netherlands
3015 GD

Study participating centre
Sint Franciscus Gasthuis
Netherlands
3045 PM

Study participating centre

Haga Ziekenhuis
Netherlands
2545 AA

Study participating centre
Isala Ziekenhuis
Netherlands
8025 AB

Study participating centre
Jeroen Bosch Ziekenhuis
Netherlands
5223 GZ

Study participating centre
Leids Universitair Medisch Centrum
Netherlands
2333 ZA

Study participating centre
Maasstad Ziekenhuis
Netherlands
3079 DZ

Study participating centre
Martini Ziekenhuis
Netherlands
9728 NT

Study participating centre
Meander MC
Netherlands
3813 TZ

Study participating centre

Maxima MC
Netherlands
5631 BM

Study participating centre
Medisch Spectrum Twente
Netherlands
7512 KZ

Study participating centre
Noordwest Ziekenhuisgroep
Netherlands
1815 JD

Study participating centre
OLVG
Netherlands
1091 AC

Study participating centre
Radboud UMC
Netherlands
6525 GA

Study participating centre
Reinier de Graaf Gasthuis
Netherlands
2625 AD

Study participating centre
Spaarne Gasthuis
Netherlands
2134 TM

Study participating centre

UMC Utrecht
Netherlands
3584 CX

Study participating centre
Ziekenhuis Gelderse Vallei
Netherlands
6716 RP

Study participating centre
Zuyderland MC
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6162 BG

Sponsor information

Organisation
Pancreatitis Werkgroep Nederland

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Sponsor type
Research organisation

Website
https://www.pancreatitis.nl/

ROR
https://ror.org/007r3zy44

Organisation
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Sponsor type
Research organisation

Website
http://www.erasmusmc.nl/

ROR
https://ror.org/018906e22

Funder(s)

Funder type
Industry

Funder Name
Mylan Healthcare B.V.

Results and Publications

Publication and dissemination plan
Planned publication in a high-impact peer-reviewed journal. The researchers would like to publish their study protocol in the future, so for now this protocol is not available online for non-participating centers.

Intention to publish date
31/07/2024

Individual participant data (IPD) sharing plan
The datasets generated and/or analysed during the current study during this study will be included in the subsequent results publication.

IPD sharing plan summary
Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		07/01/2023	09/01/2023	Yes	No