MODELS OF ACUTE PANCREATITIS
TRANSLATIONAL MEDICINE
taking discoveries for patients benefits

HEALTH CARE

QUESTION

PRACTICE

SCIENCE

EDUCATION

EDUCATION
GRADUATE AND POSTGRADUATE EDUCATION, PATIENT CLUBS
DISSEMINATION OF INFORMATION
- FOR PROFESSIONALS
- FOR NON-PROFESSIONALS

KNOWLEDGE

SCEIENTIFIC PUBLICATION

PUBLICATION
HEALTH CARE

CONSULTANT

PhD STUDENTS

RESIDENT

DATA MANAGERS

NURSE

PATIENTS COORDINATOR

DISCIPLINES

ER
LAB MEDICINE
RADIOLOGY
ICU
SURGERY

TRANSLATIONAL MEDICINE
taking discoveries for patients benefits
TRANSLATIONAL MEDICINE
taking discoveries for patients benefits

RESIDENT

PATIENTS COORDINATOR

DATA MANAGER

PhD STUDENT

PATIENTS’ CLUB LEADER

NURSES

CONSULTANTS

Translational Medicine
Converting preclinical research findings to everyday clinical practice.
WHAT WE KNOW

WHAT WE DON’T KNOW
TRANSLATIONAL MEDICINE

taking discoveries for patients benefits

THEORETICAL KNOWLEDGE

BASIC SCIENCE

APPLIED SCIENCE

CLINICAL SCIENCE

DISCOVERING NEW MECHANISMS AND TARGETS

DEVELOPING NEW DRUGS AND INTERVENTIONS

UNDERSTANDING SAFETY AND EFFECTIVENESS

MOLECULAR BIOLOGY

IMAGING

SYSTEM BIOLOGY

PHARMACOLOGY

DEVICE D.

INTERVENTIONAL D.

META-ANALYSIS

INTERVENTIONAL CT

OBSERVATIONAL CT

PROSPECTIVE DA

RETROSPECTIVE DA

CLINICAL PRACTICE

TEACHING PATIENTS CARE

EBM

THEORETICAL KNOWLEDGE

Q

A

TEACHING

Q
TRANSLATIONAL MEDICINE
taking discoveries for patients benefits

Q

BASIC SCIENCE
PURE FUNDAMENTAL RESEARCH

APPLIED SCIENCE
DEVELOP KNOWLEDGE FOR PRACTICAL APPLICATION

CLINICAL SCIENCE
PRACTICAL APPLICATION

DISCOVERING NEW MECHANISMS AND TARGETS

DEVELOPING NEW DRUGS AND INTERVENTIONS

UNDERSTANDING SAFETY AND EFFECTIVENESS

COVERED BY MOST OF THE RESEARCH GROUPS, PATHOPHYSIOLOGY, PATHOLOGY

COVERED BY MOST OF THE PHARMA DEPARTMENTS

HIGHLY COVERED BY CLINICAL GROUPS (unfortunately)

MOL BIOLOGY
IMAGING
SYSTEM BIOLOGY

PHARMACOLOGY
DEVICE D.
INTERVENTIONAL D.

META-
ANALYSIS
PROSPECTIVE DA
RETROSPECTIVE DA

UNCOVERED
RETROSPECTIVE CT
OBSERVATIONAL CT
INTERVENTIONAL CT
INTERVENTIONAL DA
TRANSLATIONAL MEDICINE

taking discoveries for patients benefits

Original article
IAP/APA evidence-based guidelines for the management of acute pancreatitis

Working Group IAP/APA Acute Pancreatitis Guidelines

ABSTRACT

Background: There have been substantial improvements in the management of acute pancreatitis since the publication of the International Association of Pancreatology (IAP) treatment guidelines in 2003. A collaboration of the IAP and the American Pancreatic Association (APA) was undertaken to revise these guidelines using an evidence-based approach.

Methods: Twelve multidisciplinary review groups performed systematic literature reviews in answer 33 predefined clinical questions. Recommendations were graded using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system. The review groups presented their recommendations during the 2013 joint IAP/APA meeting. At this one-day, interactive conference, relevant remarks were voiced and overall agreement on each recommendation was quantified using voting panels.

Results: The 33 recommendations covered 12 topics related to the clinical management of acute pancreatitis: A) diagnosis of acute pancreatitis and etiology, B) prophylaxis (predicting severity), C) imaging, D) fluid therapy, E) intensive care management, F) preventing infections, complications, G) nutritional support, H) biliary tract management, I) indications for intervention in necrotizing pancreatitis, J) timing of intervention in necrotizing pancreatitis, K) intervention strategies in necrotizing pancreatitis, and L) timing of cholecystectomy. Using the GRADE system, 23 of the 33 (69%) recommendations were rated as ‘strong’ and plenary voting revealed ‘strong agreement’ for 34 (99%) recommendations.

Conclusions: The 2013 IAP/APA guidelines provide recommendations concerning key aspects of medical and surgical management of acute pancreatitis based on the currently available evidence. These recommendations should serve as a reference standard for current management and guide future clinical research on acute pancreatitis.

OFFICIAL JOURNAL
OF IAP AND EPC
TRANSLATIONAL MEDICINE

taking discoveries for patients’ benefits
AVAILABLE EBM GUIDELINES

SLIDES
ARTICLES
VIDEO

www.pancreas.hu

Hungarian Pancreatic Study Group – Magyar Hasnyálmirigy Munkacsoport
Evidence Based Patients Information
TRANSLATIONAL MEDICINE

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HEALTH CARE

QUESTION

PRACTICE

EDUCATION

SCIENCE

EDUCATION

SCIENTIFIC

PUBLICATION

KNOWLEDGE

PUBLICATION
MPTP

Mitochondrial Permeability Transition Pore

TRANSLATIONAL MEDICINE

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ALLIANCE FOR BETTER HEALTHCARE IN GASTROENTEROLOGY

www.tm-centre.org
Márta K et al.. Meta-Analysis of Early Nutrition: The Benefits of Enteral Feeding Compared to a Nil Per Os Diet Not Only in Severe, but Also in Mild and Moderate Acute Pancreatitis. Int J Mol Sci. 2016 Oct 20;17(10).
Mortality

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Intervention

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ALLIANCE FOR BETTER HEALTHCARE IN GASTROENTEROLOGY

www.tm-centre.org
HUNGARIAN COHORT
n=600

MOD 30%

MILD 61.2%

SEV 8.8%

NG FEEDING
n=195

MOD 14.8%

MILD 76.9%

SEV 8.2%

1800 kcal/day

11.74 days

415 days

26.23 days

9.61 days

27.06 days
HUNGARIAN COHORT
n=600

Mortality

% of AP

TOTAL
Mild AP
Mod AP
Sev AP

2.8%
0.3%
0.6%

28.3%

HUNGARIAN COHORT
n=600

Mild AP
Mod AP
Sev AP

2.8%
0.3%
0.6%

28.3%

Mortality

% of AP

TOTAL
Mild AP
Mod AP
Sev AP

2.8%
0.3%
0.6%

28.3%

Mortality

% of AP

TOTAL
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28.3%

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Mortality

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Mild AP
Mod AP
Sev AP

2.8%
0.3%
0.6%

28.3%

Mortality

% of AP

TOTAL
Mild AP
Mod AP
Sev AP

2.8%
0.3%
0.6%

28.3%
General Utilization of early energy in Acute pancreatitis

Registration: ISRCTN63827758
Started: 28/01/2017
Expected end date: 01/12/2022
Enrolled patients: 325/957
Joined centers: 4
Maléth J et al. Alcohol disrupts levels and function of the cystic fibrosis transmembrane conductance regulator to promote development of pancreatitis. *Gastroenterology* 2015

Kiss L et al. The effect of serum triglyceride concentration on the outcome of acute pancreatitis: systematic review and meta-analysis. *Scientific Reports*, 2018
Early Elimination of Fatty Acids in hypertriglyceridemia-induced acute pancreatitis (ELEFANT trial): protocol of an open-label multicenter randomized clinical trial.

Registration: ISRCTNXXXXXX
Started: 01/10/2019
Expected end date: 01/12/2022
Enrolled patients: 0/457
Joined centers: 4

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KEY ELEMENTS OF SUCCESSFUL REGISTRIES AND CLINICAL TRIALS
INTERDISHCIPLINARY
TRANSLATIONAL MEDICINE

taking discoveries for patients benefits

CENTRAL INTERDISCIPLINARY UNIT

MEDICAL GROUP COORDINATORS

DATA MANAGEMENT GROUP

STATISTICAL GROUP

IT GROUP

HEALTH ECONOMICS GROUP

MEDIA GROUP

PATIENT CLUB COORDINATOR

HR AND FINANCIAL GROUP
SELF ASSESSMENT
Ensuring data quality

• Professional coordination
• Courses and trainings
• Data upload control system
  • local administrator check (1.)
  • local investigator check (2.)
• In-house monitoring
  • central administrator (3.)
  • central investigator (4.)
• On-site monitoring

Meta-analysis course

CRA Training
META-ANALYSIS PROTOCOL
Clinical question PICO
Pre-search
PROSPERO registration
Search
Filtering publications
Data collection
Bias evaluation
Statistical analysis
Interpretation
Manuscript
Publication
REGISTRY PROTOCOL
- Short summary
- Feasibility
- International registries
- Discussion
- Documentation
- Ethical permission
- IT development
- Patient enrollment
- Analysis
- Publication
Clinical Trials

CLINICAL TRIAL PROTOCOL
- Short summary
- Feasibility
- International registries
- Sample size calculation
- Discussion
- Documentation
- Ethical permission
- Registration
- IT development
- Patient enrollment
- Analysis
- Publication
ECEPSG

Eastern and Central European Pancreatic Study Group

HUNGARIAN PANCREATIC STUDY GROUP

number of cases

Centres

Dec 2012
322

Feb 2013
420

Feb 2014
820

Nov 2014
1230

Jul 2015
1590

Nov 2015
1750

May 2016
2154

Oct 2016
2423

Apr 2017
3530

Apr 2018
5338

TRANSLATIONAL MEDICINE
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YOUNG TALENTS
## 40 HPSG

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TRANSLATIONAL MEDICINE
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TRANSPARENCY

sincerity
clarity
openness
truth
accuracy
directness
fairness
honesty
believability
forthrightness
# AUTHORSHIP TABLE

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Antibiotic therapy in acute pancreatitis: From global overview to evidence-based recommendations


A Multicenter, International Cohort Analysis of 1435 Cases to Support Clinical Trial Design in Acute Pancreatitis

Multiple hits in acute pancreatitis: components of metabolic syndrome synergize each other’s deteriorating effects

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