

AER 2019



AER

ACTUALITÉS EN RÉANIMATION

25^{ème} AER : 19 & 20 novembre 2020

Réanimation Digestive

Que retenir de 2019 ?

(et aussi des années antérieures...)

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Réanimation Digestive

Que retenir de 2019 ?

(et aussi des années antérieures...)

Thomas LESCOT

Lien d'intérêt



**FRESENIUS
KABI**

caring for life

Plan

Pancréatite aigüe

Infections Intraabdominales

Insuffisance hépatique

Hémorragie digestive

Nutrition Clinique

Période post-opératoire de chirurgie abdominale

Plan

Pancréatite aigüe

Infections Intraabdominales

Insuffisance hépatique

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Période post-opératoire de chirurgie abdominale

Pancréatite aigüe - généralités

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LES RECTIFICATIONS DE L'ORTHOGRAPHE

CONSEIL SUPÉRIEUR DE LA LANGUE FRANÇAISE

4. *Tréma* : dans les mots suivants, on place le tréma sur la voyelle qui doit être prononcée : **aigüe** (et dérivés, comme **suraigüe**, etc.), **ambigüe**, **exigüe**, **contigüe**, **ambigüité**, **exigüité**, **contigüité**, **cigüe**. Ces mots appliquent ainsi la règle générale : le tréma indique qu'une lettre (*u*) doit être prononcée (comme voyelle ou comme semi-voyelle) séparément de la lettre précédente (*g*). (voir Analyse 3.1.)

ANNALS *of* SURGERY

VOL. LXXXI

JANUARY, 1925

No. 1

THE EARLY DAYS OF THE ANNALS OF SURGERY

BY WILLIAM WILLIAMS KEEN, M.D.

OF PHILADELPHIA, PA.

EMERITUS PROFESSOR OF SURGERY IN THE JEFFERSON MEDICAL COLLEGE OF PHILADELPHIA
DOCTOR, HONORIS CAUSA, UNIVERSITY OF PARIS

ACUTE PANCREATITIS

BY SIR BERKELEY MOYNIHAN, F.R.C.S.

OF LEEDS, ENGLAND

ACUTE pancreatitis is the most terrible of all the calamities that occur in connection with the abdominal viscera. The suddenness of its onset, the illimitable agony which accompanies it, and the mortality attendant upon it, all render it the most formidable of catastrophies. The disease (in accordance with the classification suggested by Fitz, of Boston, one of the greatest of physicians, who first described it in the year 1889) is generally said to be of three types, hemorrhagic, gangrenous and suppurative. The three types differ only in degree. In the most acute form of all, which is rapidly fatal unless an early operation is performed, hemorrhage is found

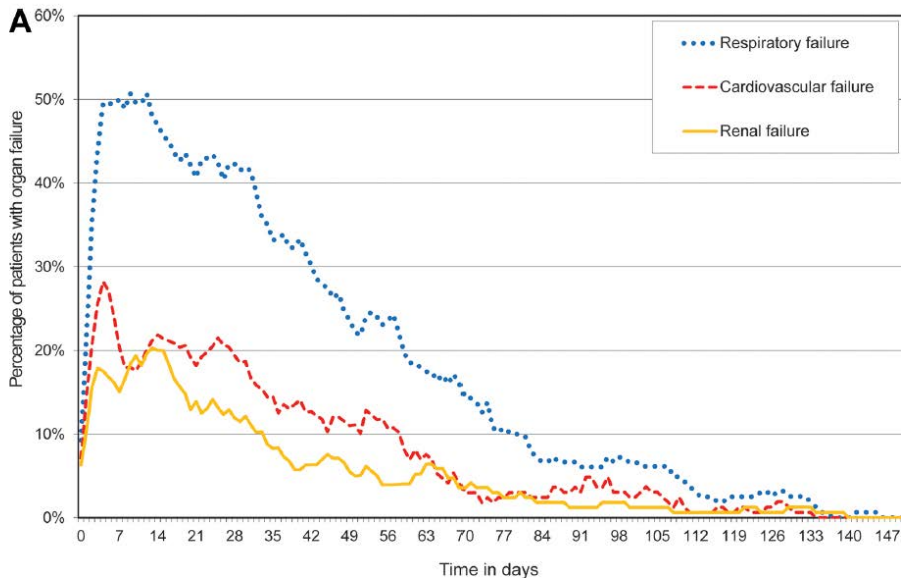
Impact of characteristics of organ failure and infected necrosis on mortality in necrotising pancreatitis

Nicolien J Schepers,¹ Olaf J Bakker,² Marc G Besselink,³ Usama Ahmed Ali,⁴ Thomas L Bollen,⁵ Hein G Gooszen,⁶ Hjalmar C van Santvoort,² Marco J Bruno,¹ for the Dutch Pancreatitis Study Group

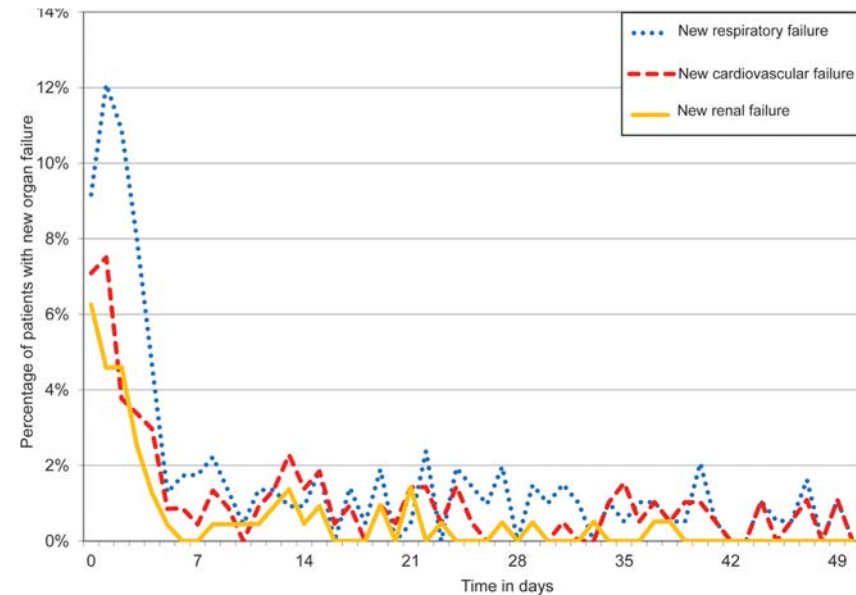
Gut 2019

639 Patients with necrotising pancreatitis 38% developed organ failure

% of patients with OF



% of patients with new OF



Respiratory failure
92 %

cardiovascular failure
82 %

Renal failure
44 %

Impact of characteristics of organ failure and infected necrosis on mortality in necrotising pancreatitis

Gut 2019

Nicolien J Schepers,¹ Olaf J Bakker,² Marc G Besselink,³ Usama Ahmed Ali,⁴ Thomas L Bollen,⁵ Hein G Gooszen,⁶ Hjalmar C van Santvoort,² Marco J Bruno,¹ for the Dutch Pancreatitis Study Group

Table 2 Mortality in different subgroups in 240 patients with organ failure

Subgroups	Mortality (%) in transient organ failure	Mortality (%) in persistent organ failure
Single organ failure		
Any organ system	2/15 (13)	11/53 (21)
Cardiovascular	0/6 (0)	2/4 (50)
Respiratory	0/3 (0)	8/46 (17)
Renal	2/6 (30)	1/3 (33)
Multiple organ failure (any two or more organ systems)	0/6 (0)	72/166 (43)
Any two organ systems	0/6 (0)	39/114 (34)
Cardiovascular and respiratory	0/6 (0)	32/90 (36)
Respiratory and renal	–	7/21 (33)
Renal and cardiovascular	–	0/3 (0)
All three organ systems	–	33/52 (63)

Pancréatite aiguë – Péridurale thoracique

THE USE OF EPIDURAL BLOCK IN ACUTE PANCREATITIS:
A REPORT OF EIGHT CASES

R. A. BROWNE, M.B., CH.B., F.F.A.R.C.S. (ENG.), AND
E. J. ASHWORTH, M.B., B.S. (LOND.)^o

Can. Anaes. Soc. J., vol. 16, no. 5, September 1969

- Analgesic effect
- Targeted sympathectomy in the anesthetized region
- Splanchnic vasodilatation and an improvement in local microcirculation
- Pulmonary effects

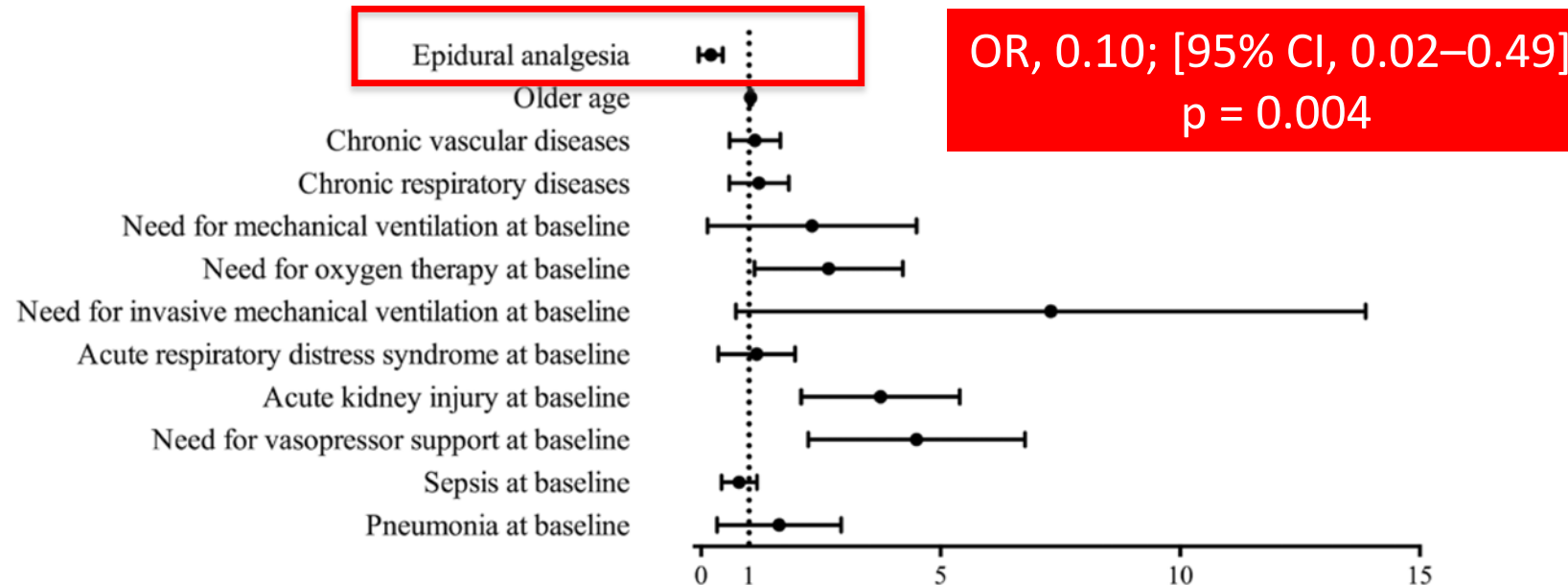
Pancréatite aigüe – Péridurale thoracique

Thoracic Epidural Analgesia and Mortality in Acute Pancreatitis: A Multicenter Propensity Analysis

CCM 2018

Matthieu Jabaudon, MD, PhD^{1,2}; Nouria Belhadj-Tahar, MD³; Thomas Rimmelé, MD, PhD⁴;
Olivier Joannes-Boyau, MD⁵; Stéphanie Bulyez, MD¹; Jean-Yves Lefrant, MD, PhD⁶;
Yannick Malledant, MD, PhD⁷; Marc Leone, MD, PhD⁸; Paer-Selim Abback, MD, MSc⁹;
Fabienne Tamion, MD, PhD¹⁰; Hervé Dupont, MD, PhD¹¹; Brice Lortat-Jacob, MD¹²;
Philippe Guerci, MD¹³; Thomas Kerforné, MD¹⁴; Raphael Cinotti, MD¹⁵; Laurent Jacob, MD, PhD¹⁶;
Philippe Verdier, MD¹⁷; Thierry Dugernier, MD, PhD¹⁸; Bruno Pereira, PhD¹⁹;
Jean-Michel Constantin, MD, PhD^{1,2}; Azurea Network

Multicenter retrospective, observational, cohort study
1003 **ICU** patients with acute pancreatitis
30-day mortality



Pancréatite aigüe – Péridurale thoracique

Open Access

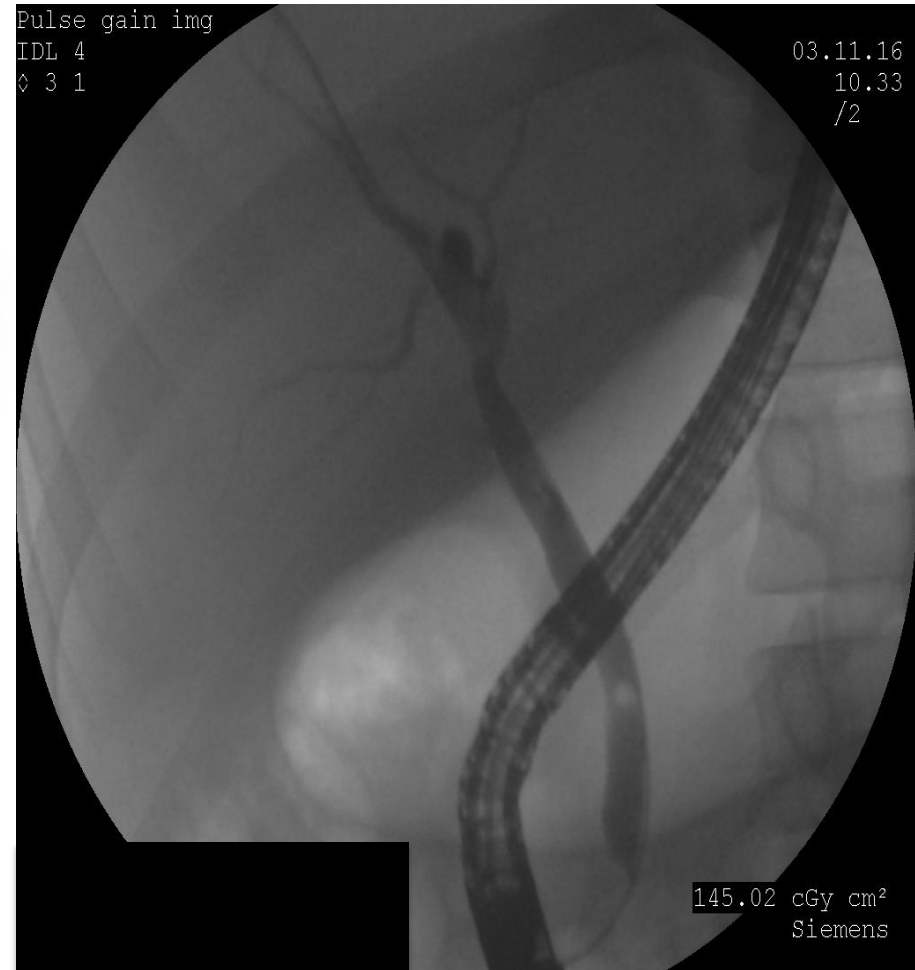
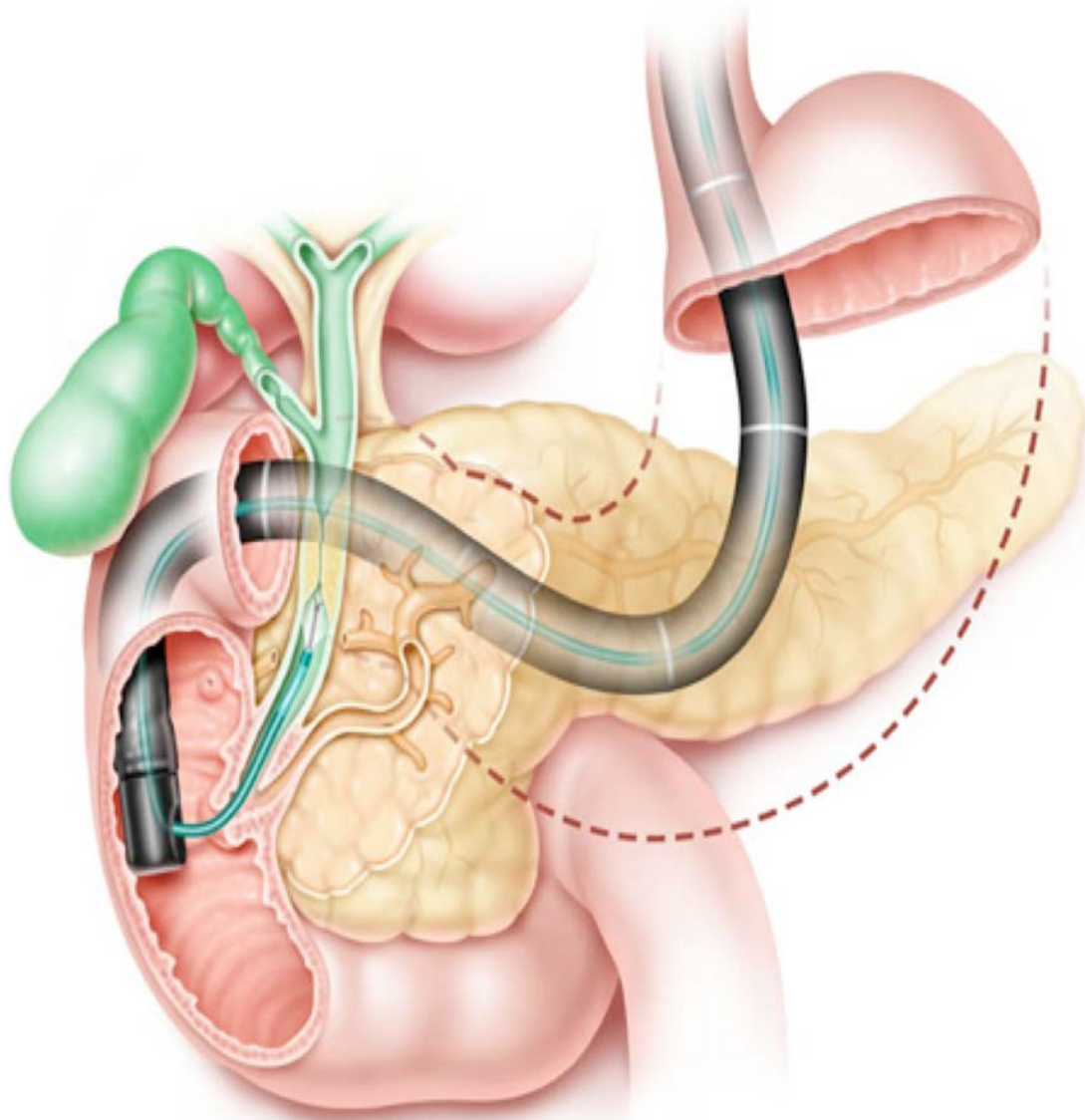
Protocol

BMJ Open Epidural analgesia in critically ill patients with acute pancreatitis: the multicentre randomised controlled EPIPAN study protocol

Stéphanie Bulyez,¹ Bruno Pereira,² Elodie Caumon,² Etienne Imhoff,¹ Laurence Roszyk,^{3,4} Lise Bernard,^{5,6} Leo Bühler,⁷ Claudia Heidegger,⁸ Samir Jaber,⁹ Jean-Yves Lefrant,¹⁰ Russell Chabanne,¹ Pierre-Marie Bertrand,¹¹ Pierre-François Laterre,¹² Philippe Guerci,¹³ Pierre-Eric Danin,¹⁴ Etienne Escudier,¹⁵ Achille Sossou,¹⁶ Dominique Morand,² Vincent Sapin,^{3,4} Jean-Michel Constantin,^{1,4} Matthieu Jabaudon,^{1,4} on behalf of the EPIPAN study group and the AzuRea network

En cours

Pancréatite aigüe – CPRE: indications et timing



Pancréatite aigüe – CPRE: indications et timing

Gallstone pancreatitis

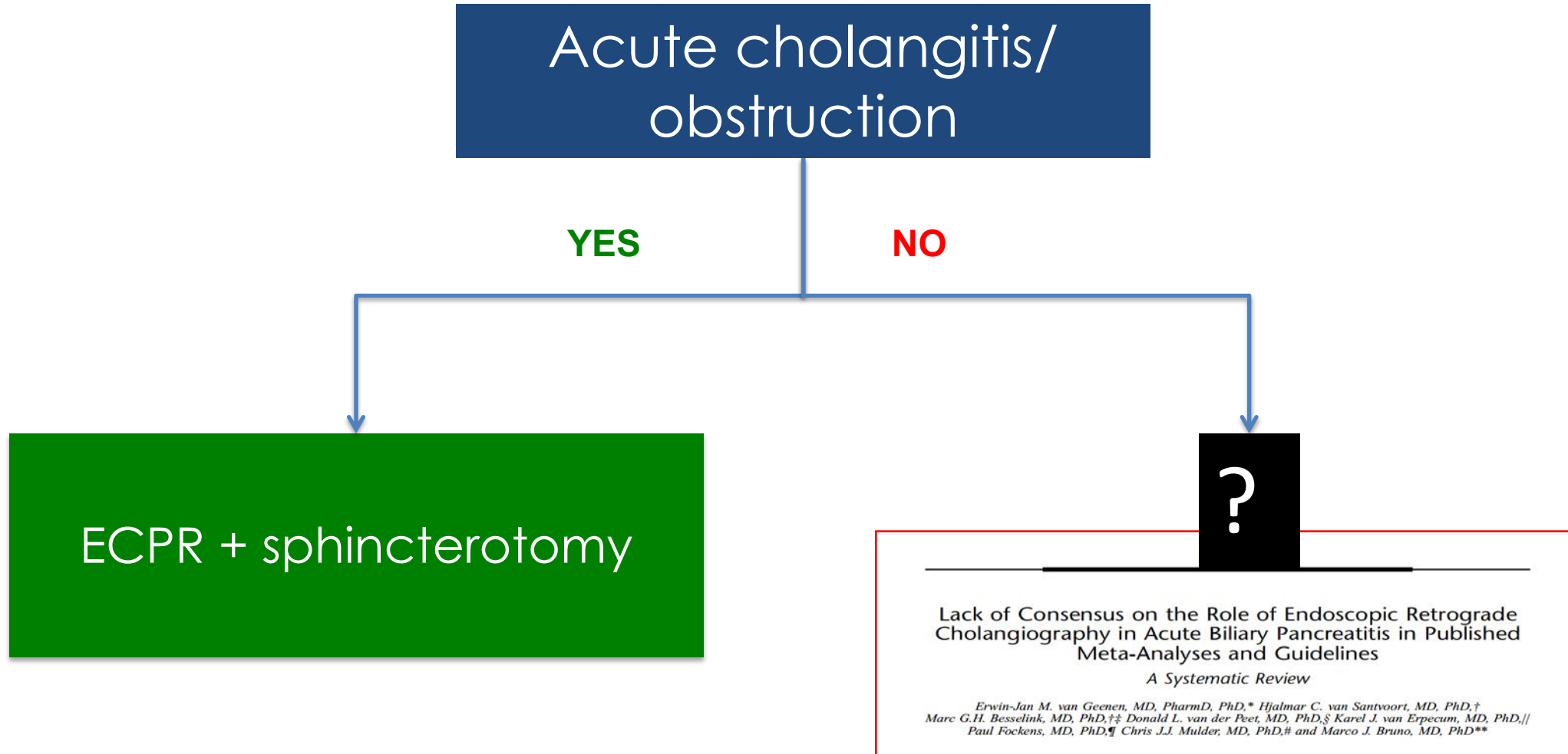
Acute cholangitis/
obstruction

Challenging diagnosis

- SIRS
- Charcot's triad
- expert opinion
- Tokyo guidelines (TG13)

Pancréatite aigüe – CPRE: indications et timing

Gallstone pancreatitis



Pancréatite aigüe – CPRE: indications et timing

Schepers et al. *Trials* (2016) 17:5
DOI 10.1186/s13063-015-1132-0

Trials

STUDY PROTOCOL

Open Access



Early biliary decompression versus conservative treatment in acute biliary pancreatitis (APEC trial): study protocol for a randomized controlled trial



Nicolien J. Schepers^{1,2*}, Olaf J. Bakker³, Marc G. H. Besselink⁴, Thomas L. Bollen⁵, Marcel G. W. Dijkgraaf⁶, Casper H. J. van Eijck⁷, Paul Fockens⁸, Erwin J. M. van Geenen⁹, Janneke van Grinsven^{4,8}, Nora D. L. Hallensleben^{1,10}, Bettina E. Hansen¹, Hjalmar C. van Santvoort¹⁰, Robin Timmer¹, Marie-Paule G. F. Anten¹¹, Clemens J. M. Bolwerk¹², Foke van Delft¹³, Hendrik M. van Dullemen¹⁴, G. Willemien Erkelens¹⁵, Jeanin E. van Hooff⁸, Robert Laheij¹⁶, René W. M. van der Hulst¹⁷, Jeroen M. Jansen¹⁸, Frank J. G. M. Kubben¹⁹, Sjoerd D. Kuiken²⁰, Lars E. Perk²¹, Rogier J. J. de Ridder²², Mamo C. M. Rijk²³, Tessa E. H. Römkens²⁴, Erik J. Schoon²⁵, Matthijs P. Schwartz²⁶, B. W. Marcel Spanier²⁷, Adriaan C. I. T. L. Tan²⁸, Willem J. Thijs²⁹, Niels G. Venneman³⁰, Frank P. Vleggaar³¹, Wim van de Vrie³², Ben J. Witteman³³, Hein G. Gooszen³⁴, Marco J. Bruno¹ and for the Dutch Pancreatitis Study Group

Methods/Design: The APEC trial is a randomized controlled, parallel group, superiority multicenter trial. Within 24 hours after presentation to the emergency department, patients with biliary pancreatitis without cholangitis and at high risk for complications, based on an Acute Physiology and Chronic Health Evaluation (APACHE-II) score of 8 or greater, Modified Glasgow score of 3 or greater, or serum C-reactive protein above 150 mg/L, will be randomized. In 27 hospitals of the Dutch Pancreatitis Study Group, 232 patients will be allocated to early ERC with sphincterotomy or to conservative treatment. The primary endpoint is a composite of major complications (that is, organ failure, pancreatic necrosis, pneumonia, bacteremia, cholangitis, pancreatic endocrine, or exocrine insufficiency) or death within 180 days after randomization. Secondary endpoints include ERC-related complications,

Pancréatite aigüe – CPRE: indications et timing

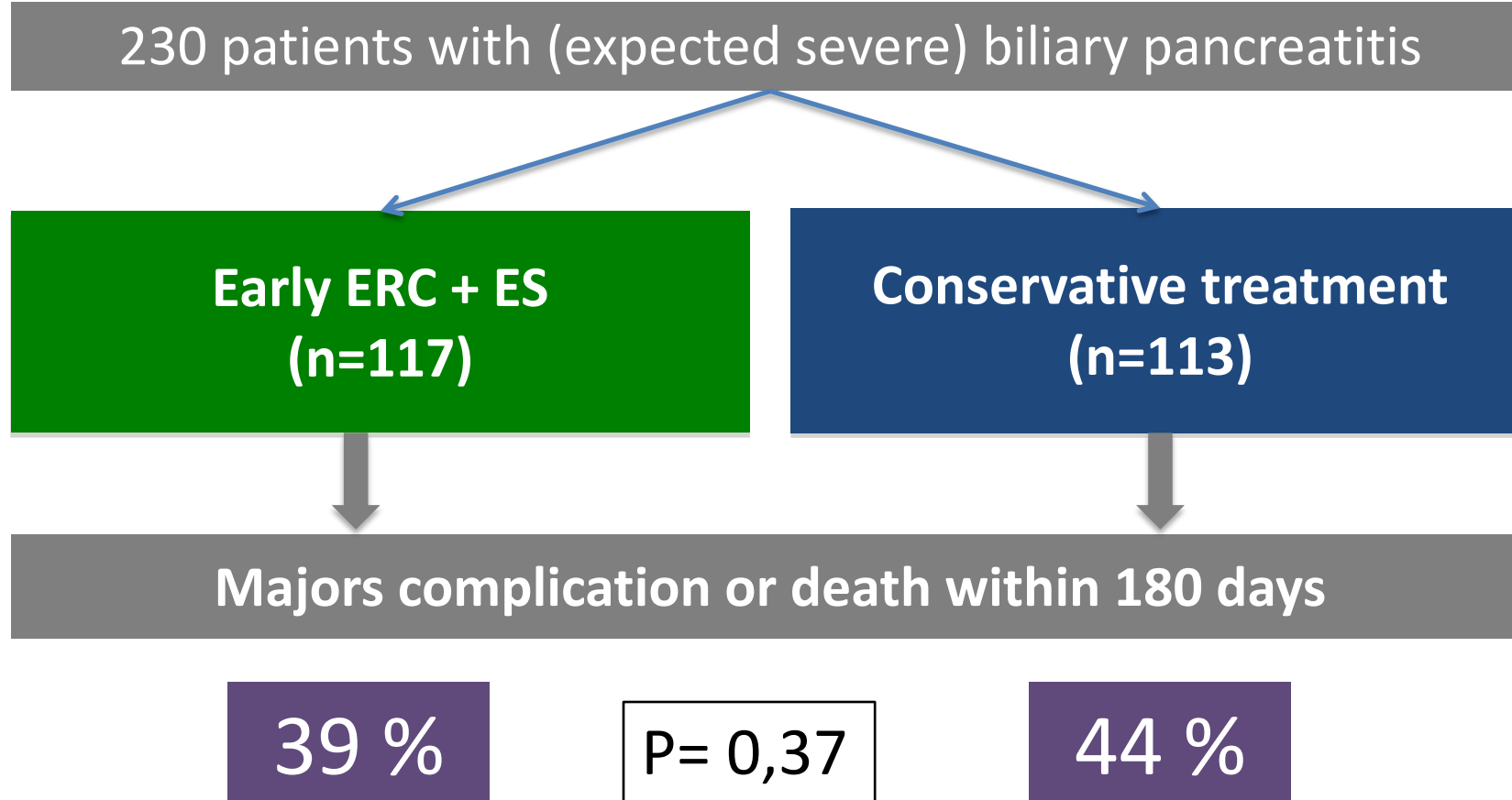
STUDY PROTOCOL

Open Access



Early biliary decompression versus conservative treatment in acute biliary pancreatitis (APEC trial): study protocol for a randomized controlled trial

Abstract– Gastroenterology 2019

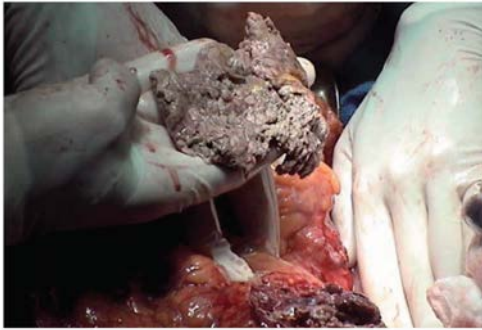


Pancréatite aiguë – CPRE: indications et timing

- Urgent (> 24 jours) ERCP and biliary drainage in patients with acute biliary pancreatitis combined with cholangitis
- ERCP should be performed within 72 hours in patients ongoing biliary obstruction
- It should not be performed in patient with acute biliary pancreatitis and neither cholangitis or ongoing duct obstruction

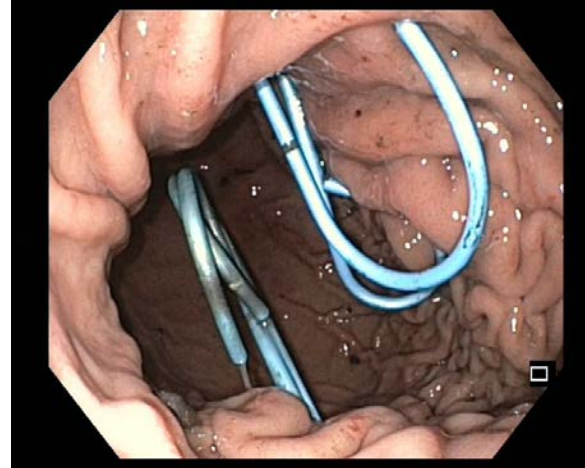
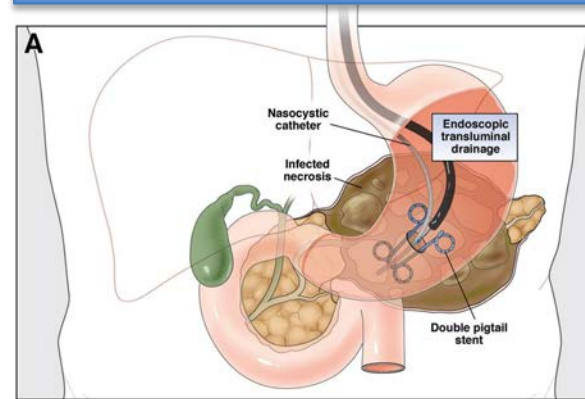
Pancréatite aigüe – Nécrosectomie

CHIRURGIE

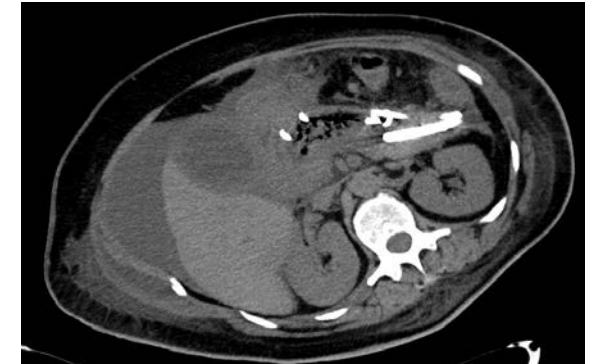


TECHNIQUES MINI INVASIVES

Necrosectomie transgastrique



Drainage radioguidé



Van Santvoort, NEJM 2010
Bakker OJ, JAMA 2012
Van Brunschot Lancet 2017

Pancréatite aigüe – Nécrosectomie

RESEARCH

Open Access



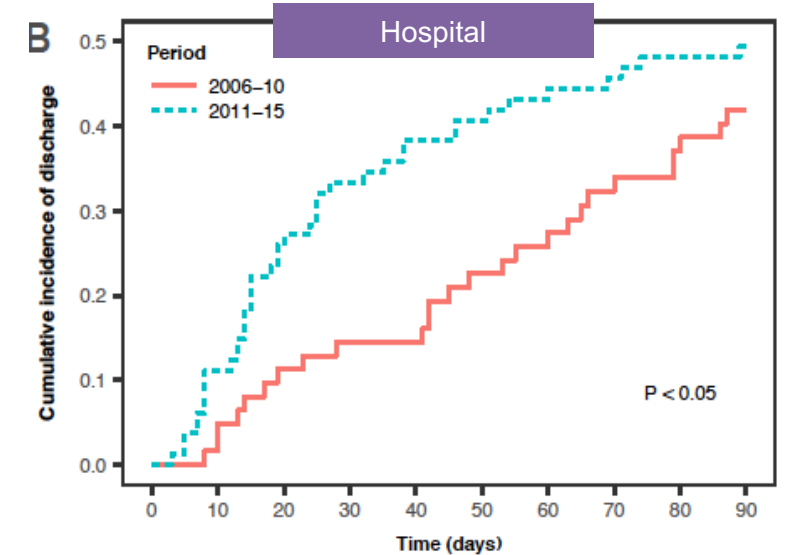
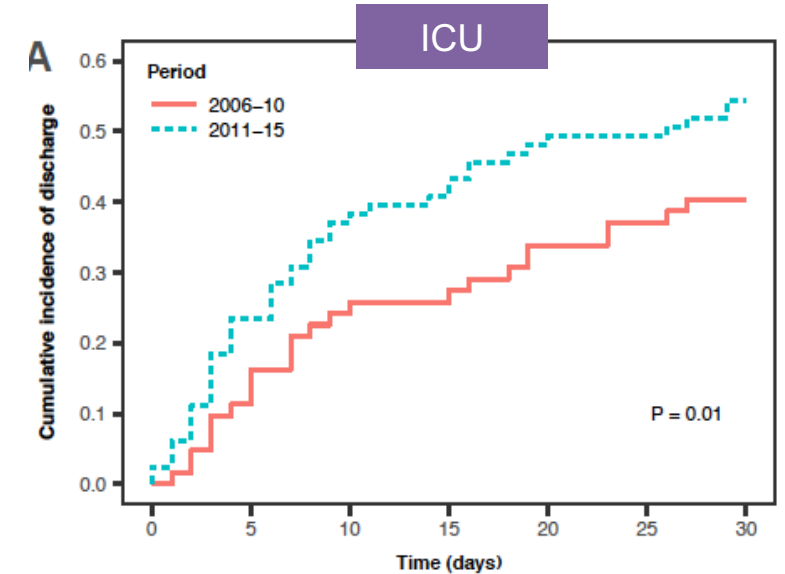
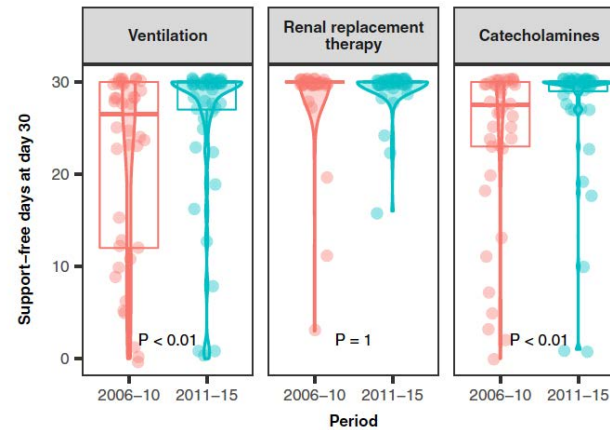
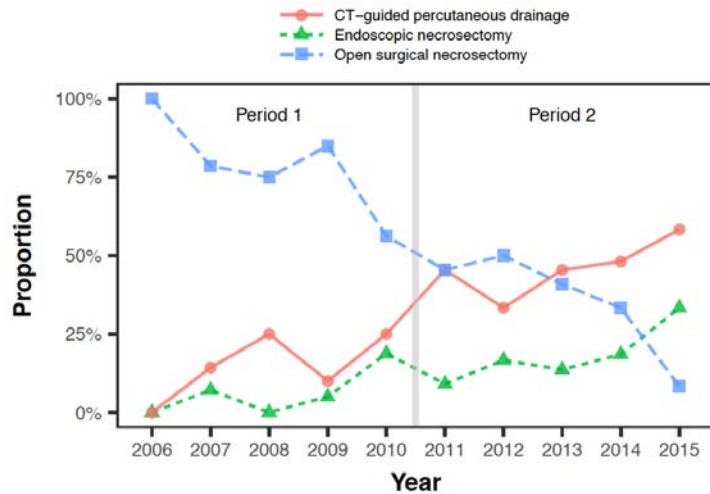
Minimally invasive drainage in critically ill patients with severe necrotizing pancreatitis is associated with better outcomes: an observational study

Lucie Darrivere¹, Nathanael Lapidus², Nikias Colignon³, Najim Chafai⁴, Ulriikka Chaput⁵, Franck Verdonk⁶, François Paye⁷ and Thomas Lescot^{8*}

Critical Care 2018

Cohorte monocentrique (143 pts)

Avant / Après implémentation des techniques mini invasives



Pancréatite aigüe – Nécrosectomie

A suivre...

Grinsven *et al. Trials* (2019) 20:239
<https://doi.org/10.1186/s13063-019-3315-6>


Trials

STUDY PROTOCOL

Open Access

Postponed or immediate drainage of infected necrotizing pancreatitis (POINTER trial): study protocol for a randomized controlled trial



Janneke van Grinsven^{1,2*} , Sven M. van Dijk^{1,2}, Marcel G. Dijkgraaf³, Marja A. Boermeester¹, Thomas L. Bollen⁴, Marco J. Bruno⁵, Sandra van Brunschot^{6,7}, Cornelis H. Dejong^{8,9}, Casper H. van Eijck¹⁰, Krijn P. van Lienden¹¹, Djamila Boerma², Peter van Duijvendijk¹², Muhammed Hadithi¹³, Jan Willem Haveman¹⁴, René W. van der Hulst¹⁵, Jeroen M. Jansen¹⁶, Daan J. Lips¹⁷, Eric R. Manusama¹⁸, I. Quintus Molenaar⁷, Donald L. van der Peet¹⁹, Alexander C. Poen²⁰, Rutger Quispel²¹, Alexander F. Schaapherder²², Erik J. Schoon²³, Matthijs P. Schwartz²⁴, Tom C. Seerden²⁵, B. W. Marcel Spanier²⁶, Jan Willem Straathof²⁷, Niels G. Venneman²⁸, Wim van de Vrie²⁹, Ben J. Witteman³⁰, Harry van Goor³¹, Paul Fockens⁶, Hjalmar C. van Santvoort^{2,7†}, Marc G. Besselink^{1*†} and for the Dutch Pancreatitis Study Group

Plan

Pancréatite aigüe

Infections Intraabdominales

Insuffisance hépatique

Hémorragie digestive

Nutrition Clinique

Période post-opératoire de chirurgie abdominale

Infections intra-abdominales



Short-course antibiotic therapy for critically ill patients treated for postoperative intra-abdominal infection: the DURAPOP randomised clinical trial

ICM 2018

Philippe Montravers^{1,18*}, Florence Tubach², Thomas Lescot³, Benoit Veber⁴, Marina Esposito-Farèse⁵, Philippe Seguin⁶, Catherine Paugam⁷, Alain Lepape⁸, Claude Meistelman⁹, Joel Cousson¹⁰, Antoine Tesniere¹¹, Gaetan Planteveve¹², Gilles Blasco¹³, Karim Asehnoune¹⁴, Samir Jaber¹⁵, Sigismund Lasocki¹⁶, Herve Dupont¹⁷ and For the DURAPOP Trial Group

Comparaison de la durée du traitement antibiotique des patients hospitalisés en réanimation pour péritonite post opératoire

8 jours (120 pts) vs 15 jours (116 pts)

=> Nombre de jours sans antibiotiques à J28

Primary and secondary outcomes	15-day arm (n=116)	8-day arm (n=120)	Odd-ratios (95%CI)	P value
Primary outcome				
Antibiotic-free days on Day28, median [IQR] ^a	12 [6—13]	15 [6—20]	1.08 (1.04—1.125)	1.9 x 10 ⁻⁴
Secondary outcome				
Length of ICU stay between Day0 and Day45, median [IQR] ^b	12 [7—20]	13 [7.75—25]	1.02 (0.99—1.04)	0.14
Length of hospital stay between Day0 and Day45, median [IQR] ^c	30 [20—45]	30.5 [18.75—45]	0.80 (0.46—1.38)	0.42
Secondary outcomes				
Organ failure on Day15, n (%) ^d	17/96 (18)	15/90 (17)	1.08 (0.47—2.50)	1.00
Organ failure on Day28, n (%) ^e	4/60 (5)	3/63 (6)	0.78 (0.11—4.82)	1.00
45-day mortality, n (%)	17/116 (15)	13/120 (11)	0.71 (0.30—1.64)	0.43
Additional source control between Day8 and Day45, n (%)	34/116 (28)	48/120 (40)	1.61 (0.90—2.87)	0.101
Reoperations between Day8 and Day45, n (%)	27/166 (23)	31/120 (26)	1.15 (0.61—2.17)	0.65
Percutaneous drainages between Day8 and Day45, n (%)	11/116 (9)	23/120 (19)	2.26 (0.99—5.41)	0.041
Recurrent infection, n (%) ^f	13/14 (93)	14/19 (74)	0.22 (0.004—2.40)	0.21
Superinfection, n (%) ^f	11/32 (34)	14/44 (32)	0.65 (0.05—5.52)	1
New antibiotic therapy, n (%)	45/116 (39)	51/120 (42)	1.17 (0.67—2.03)	0.59
New antibiotic therapy between Day16 and Day28, n (%)	25/102 (25)	29/106 (27)	1.16 (0.56—2.27)	0.75
Bacteraemia between Day8 and Day45, n (%)	5/116 (4)	13/120 (11)	2.69 (0.86—9.96)	0.059
Clinical failure between Day8 and Day45, n (%)	16 (14)	28 (24)	1.18 (0.68—2.05)	0.54
Microbiological failure between Day8 and Day45, n (%)	18 (16)	28 (23)	1.65 (0.82—3.40)	0.13
Emergence of MDR bacteria in surveillance samples, n (%) ^g	23/104 (22)	20/107 (19)	0.81 (0.39—1.67)	0.54
Emergence of MDR bacteria in clinical isolates, n (%) ^d	40/104 (38)	38/108 (35)	0.87 (0.47—1.58)	0.72
Emergence of MDR bacteria in both surveillance samples and clinical isolates confounded, n (%) ^g	52/104 (50)	46/108 (43)	0.74 (0.41—1.32)	0.28
Emergence of fungi, n (%) ^g	27/106 (25)	22/107 (21)	0.75 (0.37—1.51)	0.39



Epidemiology of intra-abdominal infection and sepsis in critically ill patients: “AbSeS”, a multinational observational cohort study and ESICM Trials Group Project

Stijn Blot^{1*}, Massimo Antonelli^{2,3}, Kostoula Arvaniti⁴, Koen Blot¹, Ben Creagh-Brown^{5,6}, Dylan de Lange⁷, Jan De Waele⁸, Mieke Deschepper⁹, Yalim Dikmen¹⁰, George Dimopoulos¹¹, Christian Eckmann¹², Guy Francois¹³, Massimo Girardis¹⁴, Despoina Koulenti^{15,16}, Sonia Labeau^{1,17}, Jeffrey Lipman^{18,19}, Fernando Lipovestky²⁰, Emilio Maseda²¹, Philippe Montravers^{22,23}, Adam Mikstaki^{24,25}, José-Artur Paiva²⁶, Cecilia Pereyra²⁷, Jordi Rello²⁸, Jean-Francois Timsit^{29,30}, Dirk Vogelaers³¹ and the Abdominal Sepsis Study (AbSeS) group on behalf of the Trials Group of the European Society of Intensive Care Medicine

=> To describe the epidemiology of intra-abdominal infection in an international cohort of **2621 ICU patients**

Antibiotic-resistant pathogen	Total cohort (n = 1982)	Geographic region							
		Western Europe (n = 601)	Southern Europe (n = 558)	Eastern and South-East Europe (n = 151)	Central Europe (n = 99)	North Africa and Middle-East (n = 172)	Latin America (n = 249)	North America (n = 22)	Asia-Pacific (n = 123)
Difficult-to-treat resistant Gram-negative bacteria	85 (4.3)	2 (0.3)	38 (6.8)	9 (6)	0	15 (8.7)	16 (6.4)	0	5 (4.1)
Any resistant Gram-negative bacteria*	480 (24.2)	54 (9)	140 (25.1)	59 (39.1)	20 (20.2)	82 (47.7)	90 (36.1)	7 (31.8)	26 (21.1)
ESBL-producing Gram-negative bacteria	326 (16.4)	37 (6.2)	81 (14.5)	37 (24.5)	9 (9.1)	65 (37.8)	69 (27.7)	7 (31.8)	20 (16.3)
Carbapenem-resistant Gram-negative bacteria	145 (7.3)	3 (0.5)	61 (10.9)	23 (15.2)	1 (1)	23 (13.4)	25 (10)	0	9 (7.3)



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Stijn Blot^{1*}, Massimo Antonelli^{2,3}, Kostoula Arvaniti⁴, Koen Blot¹, Ben Creagh-Brown^{5,6}, Dylan de Lange⁷, Jan De Waele⁸, Mieke Deschepper⁹, Yalim Dikmen¹⁰, George Dimopoulos¹¹, Christian Eckmann¹², Guy Francois¹³, Massimo Girardis¹⁴, Despoina Koulenti^{15,16}, Sonia Labeau^{1,17}, Jeffrey Lipman^{18,19}, Fernando Lipovestky²⁰, Emilio Maseda²¹, Philippe Montravers^{22,23}, Adam Mikstacki^{24,25}, José-Artur Paiva²⁶, Cecilia Pereyra²⁷, Jordi Rello²⁸, Jean-Francois Timsit^{29,30}, Dirk Vogelaers³¹ and the Abdominal Sepsis Study (AbSeS) group on behalf of the Trials Group of the European Society of Intensive Care Medicine

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=> To describe the epidemiology of intra-abdominal infection in an international cohort of **2621 ICU patients**

Variable	Model with source control achievement* OR (95% CI)	Model without source control achievement** OR (95% CI)
Setting of infection acquisition		
Community-acquired infection	Reference	Reference
Early onset hospital-acquired infection (≤ 7 days)	1.15 (0.84–1.58)	1.18 (0.88–1.59)
Late-onset hospital-acquired infection (> 7 days)	1.76 (1.34–2.32)	1.76 (1.36–2.30)
Anatomical disruption		
No anatomical barrier disruption	Reference	Reference
Anatomical disruption with localized peritonitis	1.28 (0.95–1.75)	1.26 (0.95–1.69)
Anatomical disruption with diffuse peritonitis	1.99 (1.49–2.67)	2.04 (1.55–2.70)
Severity of disease expression		
Infection	Reference	Reference
Sepsis	2.44 (1.37–4.66)	2.28 (1.31–4.28)
Septic shock	5.22 (2.91–10)	4.93 (2.80–9.30)
Age (per year increase)	1.03 (1.02–1.04)	1.03 (1.03–1.04)
Underlying conditions		
Malnutrition (body mass index < 20)	2.07 (1.34–3.17)	2.15 (1.43–3.21)
Diabetes mellitus	1.31 (0.99–1.73)	1.32 (1.01–1.72)
Liver failure	2.03 (1.23–3.33)	2.50 (1.55–4.02)
Congestive heart failure	1.86 (1.24–2.81)	1.92 (1.31–2.81)
Empiric antimicrobial coverage		
Anti-MRSA agent	0.77 (0.59–1)	0.77 (0.59–0.98)
Double anaerobe coverage	–	1.28 (0.97–1.71)
Source control achievement at day 7		
Success	Reference	–
Failure, persistent signs of inflammation	4.85 (3.79–6.22)	–
Failure, additional intervention required following initial approach	1.93 (1.41–2.65)	–

Plan

Pancréatite aigüe

Infections Intraabdominales

Insuffisance hépatique

Hémorragie digestive

Nutrition Clinique

Période post-opératoire de chirurgie abdominale

Insuffisance hépatique – RFE 2018



Recommandations formalisées d'experts

INSUFFISANCE HEPATIQUE EN SOINS CRITIQUES

RFE commune SFAR – AFEF

Société Française d'Anesthésie et de Réanimation

Association Française pour l'Etude du Foie

LIVER FAILURE IN INTENSIVE CARE UNIT

G Model
ACCPM-567; No. of Pages 19

ARTICLE IN PRESS

Anaesth Crit Care Pain Med xxx (2019) xxx-xxx



Société Française d'Anesthésie et de Réanimation



Guidelines

Management of liver failure in general intensive care unit^{☆,☆☆}

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C. Bureau^{9,10,11}, C. Camus¹², G. Chanques¹³, S. Faure¹⁴, M. Ferrandière¹⁵, C. Francoz^{16,17},
A. Galbois¹⁸, T. Gustot^{19,20}, C. Ichai²¹, P. Ichai^{22,23,24}, S. Jaber²⁵, T. Lescot²⁶,
R. Moreau^{27,28,29,30}, S. Roulet^{31,32}, F. Saliba³³, T. Thévenot³⁴, L. Velly^{35,36}, E. Weiss^{37,38,*}

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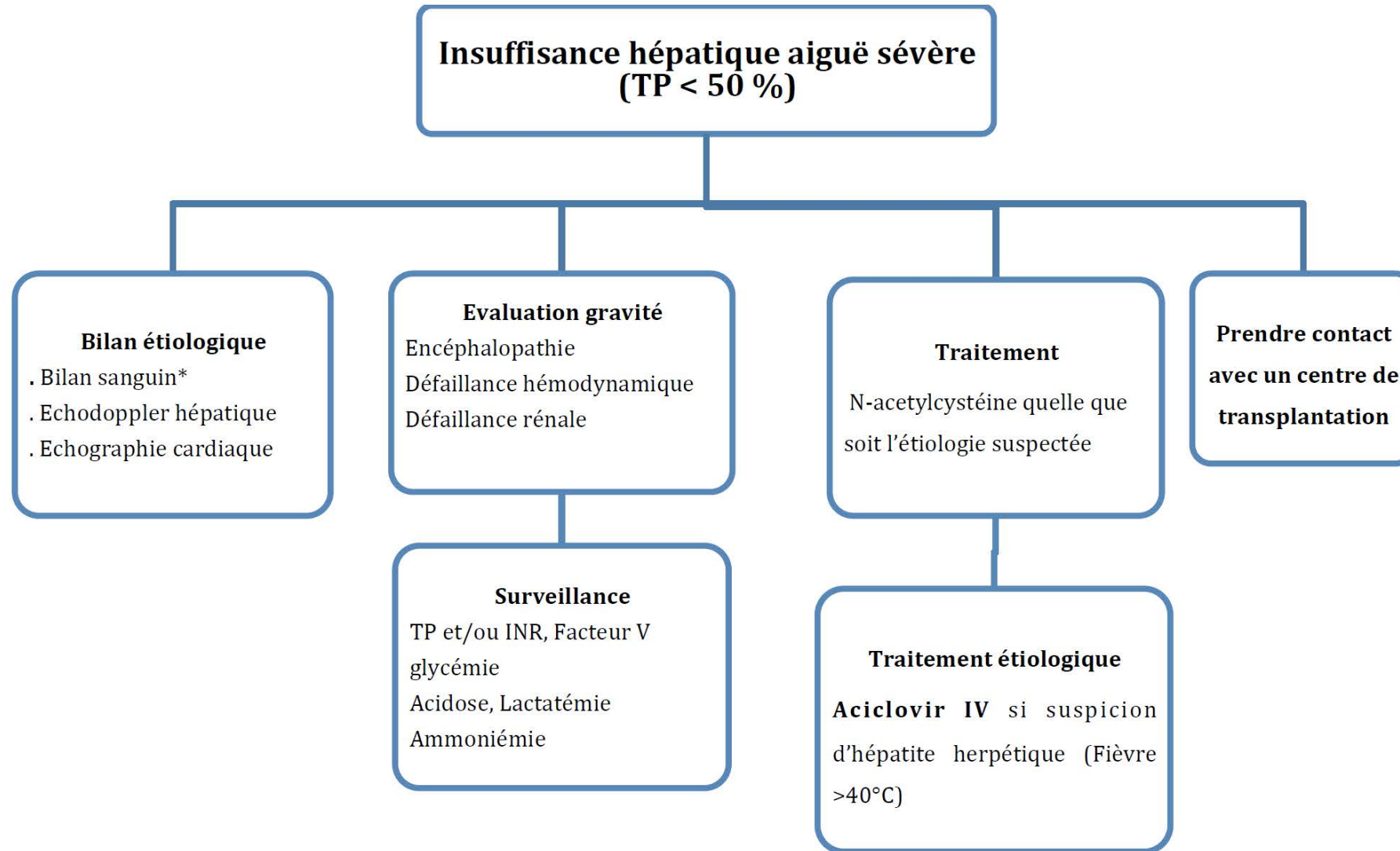
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³⁸ UMR_S1149, Centre de recherche sur l'inflammation, INSERM and University of Paris, Paris, France

Insuffisance hépatique – RFE 2018



*Chez les patients présentant une IHA sévère, il est recommandé d'effectuer le dosage sanguin du paracétamol, les sérologies virales A (IgM HAV) et B (AgHBs, IgMHbC), la recherche urinaire de toxiques (amphétamine, cocaïne), une échographie cardiaque, et un échodoppler hépatique.

Insuffisance hépatique – RFE 2018

Admission du patient cirrhotique en réanimation

R4 – Il n'est probablement pas recommandé de refuser d'admettre les patients cirrhotiques en soins critiques, du fait de leur seule maladie cirrhotique.

Grade 2-, Accord FORT

Hémorragie digestive chez le patient cirrhotique

R8.1 – Chez les patients cirrhotiques, en cas d'hémorragie digestive, il est recommandé d'administrer le plus tôt possible un traitement vasoactif intraveineux par octréotide, somatostatine ou terlipressine en association avec une antibiothérapie préventive.

Grade 1+, Accord FORT

R8.2 – Chez les patients cirrhotiques, en cas d'hémorragie digestive, il est probablement recommandé d'administrer le plus tôt possible un traitement par inhibiteurs de la pompe à protons.

Grade 2+, Accord FORT

R8.3 – Chez les patients cirrhotiques, en cas d'hémorragie digestive, il est recommandé de réaliser une endoscopie œsogastroduodénale dès que possible.

Grade 1+, Accord FORT

Plan

Pancréatite aigüe

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BMJ Open Efficacy and tolerance of early administration of tranexamic acid in patients with cirrhosis presenting with acute upper gastrointestinal bleeding: a study protocol for a multicentre, randomised, double-blind, placebo-controlled trial (the EXARHOSE study)

Matthieu Heidet,^{1,2} Roland Amathieu,^{3,4} Etienne Audureau,^{5,6} Oriane Augusto,⁷ Violaine Nicolazo de Barmon,⁷ Amandine Riolland,⁷ David Schmitz,⁷ François Pierrang,⁷ Jean Marty,^{1,2} Charlotte Chollet-Xémard,¹ Olivier Thirion,⁸ Line Jacob⁹

En cours

Hémorragie digestive – seuil transfusionnel

=> Restrictive Strategy (7-8 g/dL) vs Liberal Strategy (10 g/dL)?

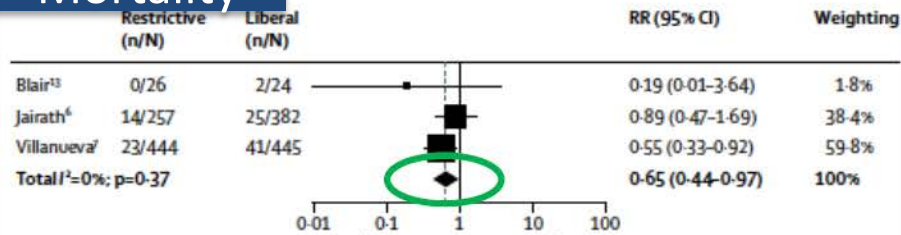


Restrictive versus liberal blood transfusion for gastrointestinal bleeding: a systematic review and meta-analysis of randomised controlled trials

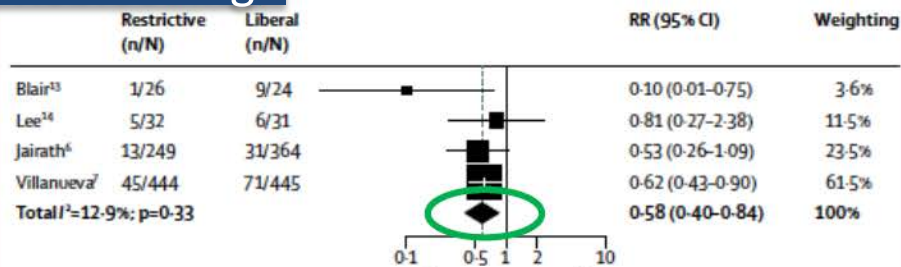
Ayodele Odutayo*, Michael J R Desborough*, Marielena Trivella, Adrian J Stanley, Carolyn Dorée, Gary S Collins, Sally Hopewell, Susan J Brunskill, Brennan C Kahan, Richard F A Logan, Alan N Barkun, Michael F Murphy, Vipul Jairath

Lancet Gastroenterol Hepatol
2017; 2: 354-60

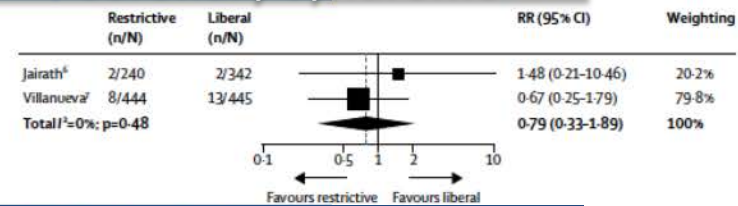
Mortality



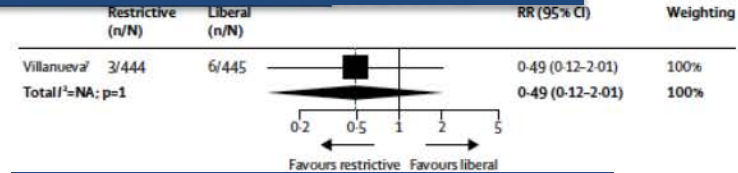
Rebleeding



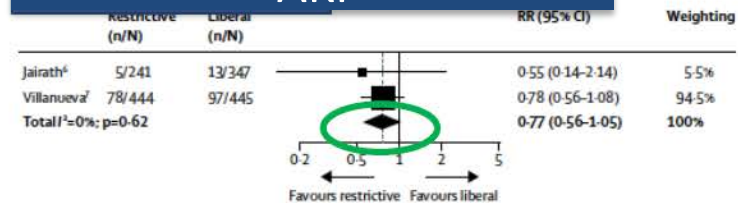
Coronary syndrome



Cerebral ischemia



AKI



Hémorragie digestive – prévention: IPP ?

The NEW ENGLAND
JOURNAL of MEDICINE

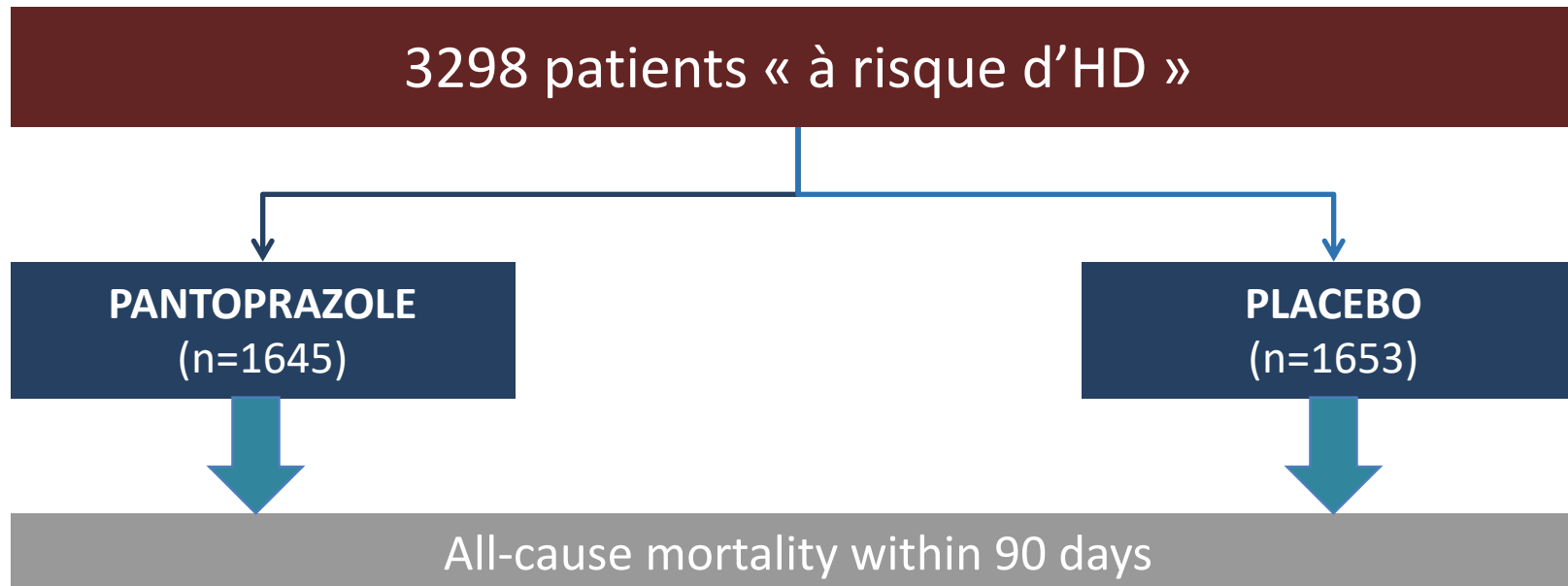
ESTABLISHED IN 1812

DECEMBER 6, 2018

VOL. 379 NO. 23

Pantoprazole in Patients at Risk for Gastrointestinal Bleeding in the ICU

M. Krag, S. Marker, A. Perner, J. Wetterslev, M.P. Wise, J.C. Schefold, F. Keus, A.B. Guttormsen, S. Bendel, M. Borthwick, T. Lange, B.S. Rasmussen, M. Siegemund, H. Bundgaard, T. Elkmann, J.V. Jensen, R.D. Nielsen, L. Liboriussen, M.H. Bestle, J.M. Elkjær, D.F. Palmqvist, M. Bäcklund, J.H. Laake, P.M. Bådstøløkken, J. Grönlund, O. Breum, A. Walli, R. Winding, S. Iversen, I.-L. Jarnvig, J.O. White, B. Brand, M.B. Madsen, L. Quist, K.J. Thornberg, A. Møller, J. Wiis, A. Granholm, C.T. Anthon, T.S. Meyhoff, P.B. Hjortrup, S.R. Aagaard, J.B. Andreasen, C.A. Sørensen, P. Haure, J. Hauge, A. Hollinger, J. Scheuzger, D. Tuchscherer, T. Vuillioinenet, J. Takala, S.M. Jakob, M.L. Vang, K.B. Pælestik, K.L.D. Andersen, I.C.C. van der Horst, W. Dieperink, J. Fjølner, C.K.W. Kjer, C. Sølling, C.G. Sølling, J. Karttunen, M.P.G. Morgan, B. Sjøbø, J. Engstrøm, B. Agerholm-Larsen, and M.H. Møller, for the SUP-ICU trial group*



Hémorragie digestive - IPP

Outcomes	Pantoprazole	Placebo	Relative Risk (95% CI)*	P Value†
Primary outcome: death by day 90 — no./total no. (%)	510/1642 (31.1)	499/1640 (30.4)	1.02 (0.91–1.13)	0.76
Secondary outcomes				
One or more clinically important events — no./total no. (%)‡	360/1644 (21.9)	372/1647 (22.6)	0.96 (0.83–1.11)	—
One or more episodes of clinically important gastrointestinal bleeding — no./total no. (%)	41/1644 (2.5)	69/1647 (4.2)	0.58 (0.40–0.86)	—
One or more infectious adverse events — no./total no. (%)§	276/1644 (16.8)	279/1647 (16.9)	0.99 (0.84–1.16)	—
Severe adverse reaction — no./total no. (%)¶	0/1644 (0)	0/1647 (0)	—	—
Median percentage of days alive without the use of life support (IQR)	92 (60–97)	92 (65–97)	—	—

~

STATISTICAL ANALYSIS

We estimated that 3350 patients would be required for the trial to have 90% power to detect a between-group difference of 5 percentage points in 90-day mortality, corresponding to a 20% difference in relative risk at a two-sided alpha level of 5%, under the assumption of a baseline 90-day mortality of 25%.^{4,13,14} The statistical analysis was performed in accordance with the International Conference on Harmonisation tripartite guideline

Nutrition entérale ?

Etiologie de l'HD?

IPP ttt de fond ?

Plan

Pancréatite aigüe

Infections Intraabdominales

Insuffisance hépatique

Hémorragie digestive

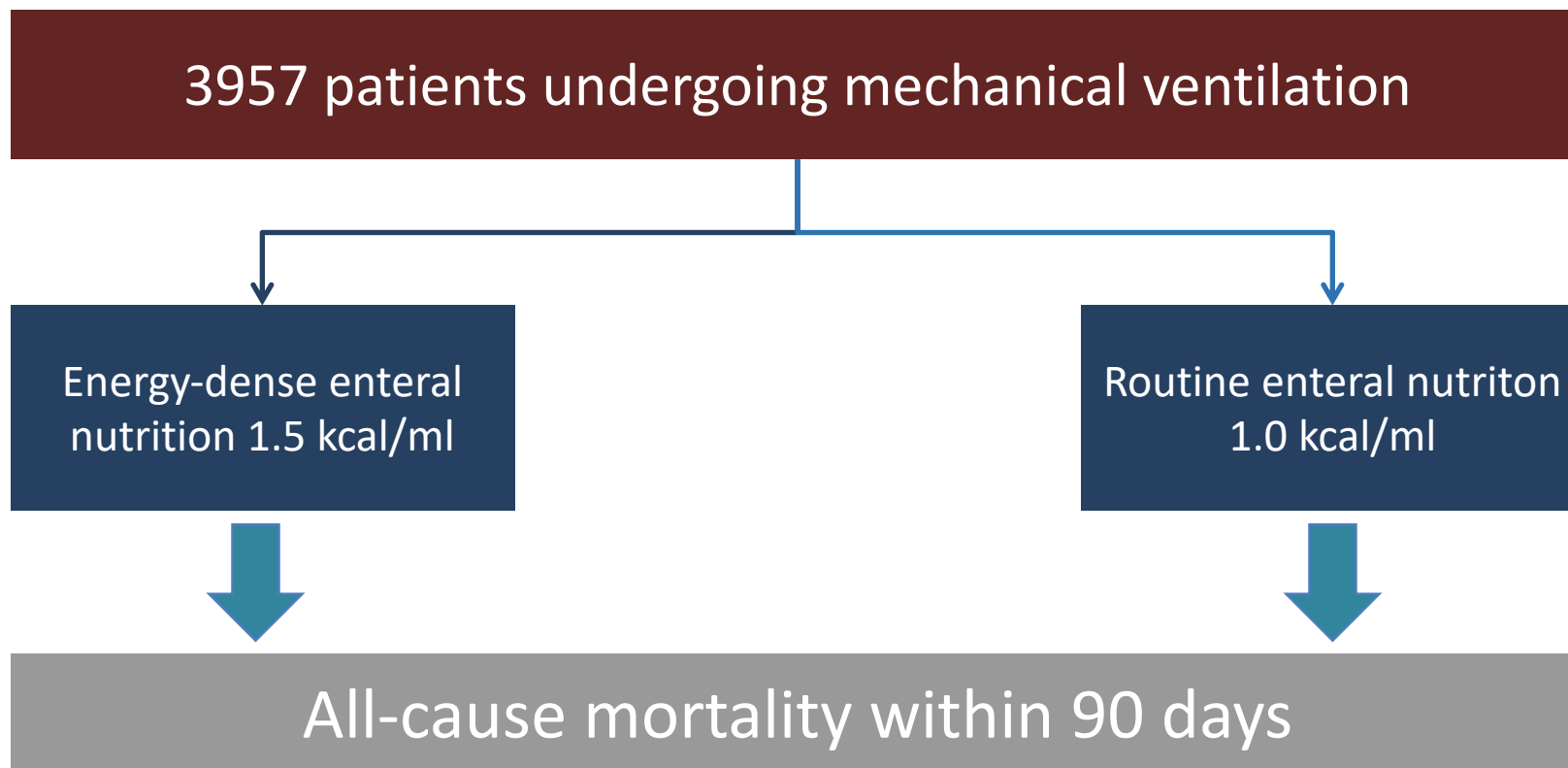
Nutrition Clinique

Période post-opératoire de chirurgie abdominale

ORIGINAL ARTICLE

Energy-Dense versus Routine Enteral Nutrition in the Critically Ill

The TARGET Investigators, for the ANZICS Clinical Trials Group*



ORIGINAL ARTICLE

Energy-Dense versus Routine Enteral Nutrition in the Critically Ill

The TARGET Investigators, for the ANZICS Clinical Trials Group*

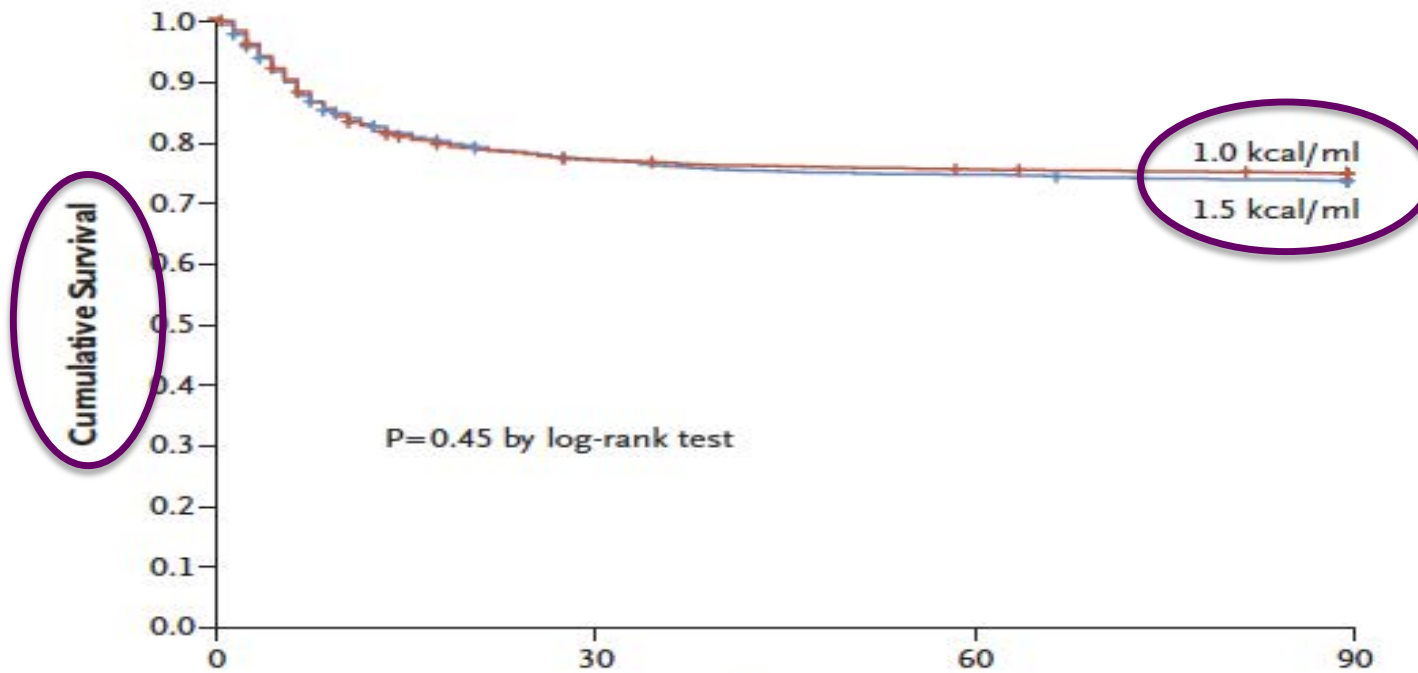
Measure	1.5-kcal Group (N=1971)	1.0-kcal Group (N=1985) [†]	Difference or Relative Risk (95% CI) [‡]
Median time from ICU admission to commencing trial nutrition (IQR) — hr	15.8 (7.7 to 26.3)	15.9 (7.9 to 28.3)	-0.4 (-1.1 to 0.4)
Median duration of trial nutrition (IQR) — days [§]	6.0 (3.0 to 11.0)	6.0 (3.0 to 11.0)	0
Volume of trial nutrition delivered — ml/day [¶]	1242±318	1262±313	-20 (-40 to 0)
Percentage of trial target rate delivered	81±17	82±16	-1 (-2 to 0)
Calories delivered — kcal/day [¶]			
Trial nutrition	1863±478	1262±313	601 (576 to 626)
Trial nutrition plus other sources	1930±547	1407±397	523 (493 to 553)
Calories delivered — kcal/kg of ideal body weight per day [¶]			
Trial nutrition	29.1±6.2	19.6±4.0	9.5 (9.2 to 9.9)
Trial nutrition plus other sources	30.2±7.5	21.9±5.6	8.3 (7.9 to 8.7)
Calories delivered — kcal/kg of actual body weight per day ^{¶**}			
Trial nutrition	23.1±7.1	15.6±4.8	7.5 (7.1 to 7.9)
Trial nutrition plus other sources	23.9±7.8	17.4±5.5	6.6 (6.2 to 7.0)
Protein delivered [¶]			
Trial nutrition — g/day	69.6±17.8	69.4±17.2	0.1 (-1.0 to 1.2)
Trial nutrition — g/kg of ideal body weight per day	1.09±0.22	1.08±0.23	0.01 (-0.01 to 0.02)

ORIGINAL ARTICLE

Energy-Dense versus Routine Enteral Nutrition in the Critically Ill

The TARGET Investigators, for the ANZICS Clinical Trials Group*

A Survival




No. at Risk

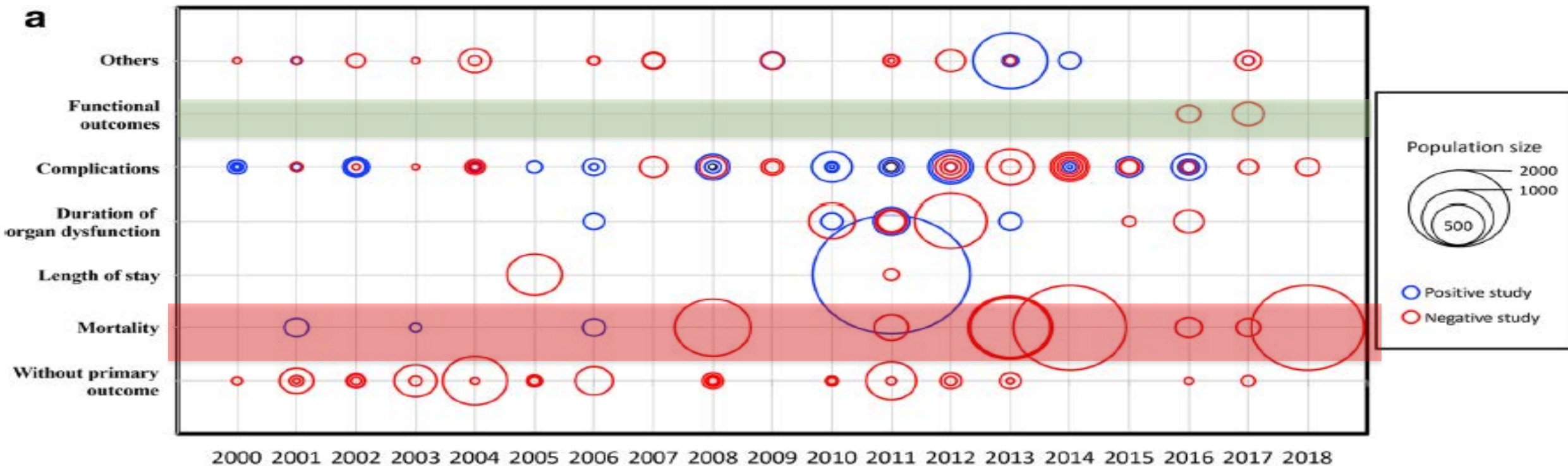
1.5 kcal/ml	1971	1495	1445	1425
1.0 kcal/ml	1985	1512	1477	1461



Outcomes used in randomised controlled trials of nutrition in the critically ill: a systematic review

Gary Taverny^{1,2}, Thomas Lescot^{3,4*} , Emmanuel Pardo³, Frederique Thonon⁵, Manar Maarouf³ and Corinne Alberti^{1,2}

170 RCT



Individualized strategies ?



Plan

Pancréatite aigüe

Infections Intraabdominales

Insuffisance hépatique

Hémorragie digestive

Nutrition Clinique

Période post-opératoire de chirurgie abdominale

IRA après chirurgie abdominale: HFNO vs O2 standard

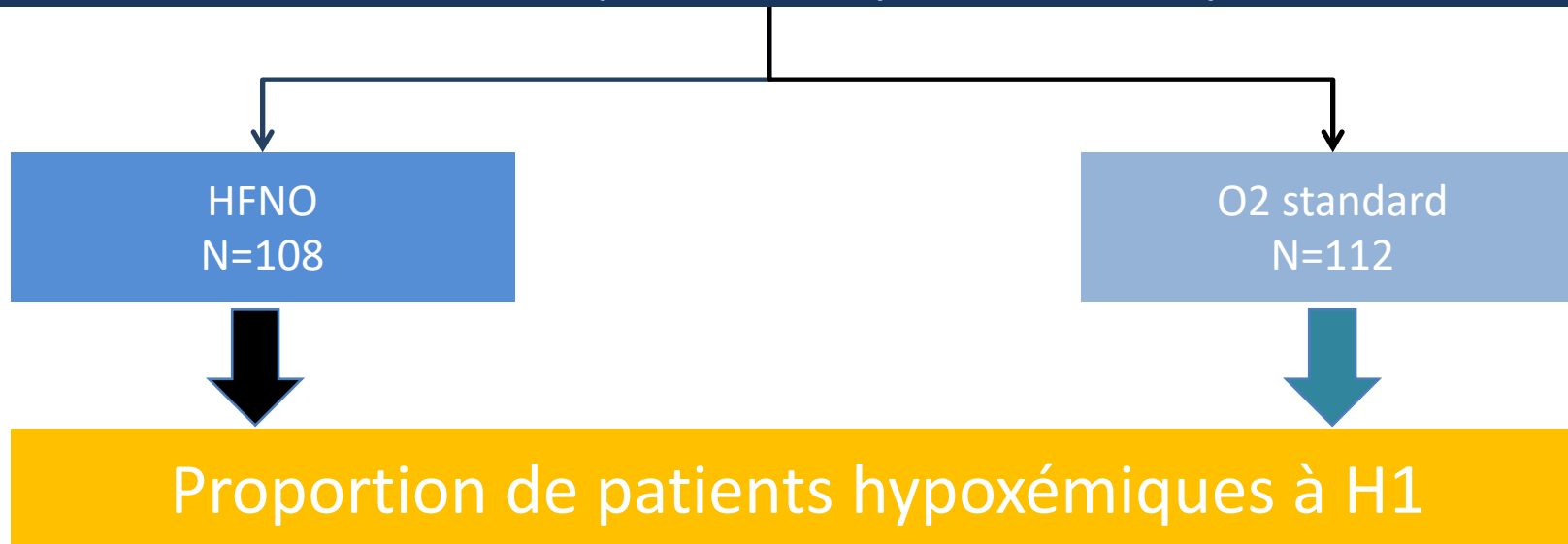
ORIGINAL

Effect of early postextubation high-flow nasal cannula vs conventional oxygen therapy on hypoxaemia in patients after major abdominal surgery: a French multicentre randomised controlled trial (OPERA)



Emmanuel Futier^{1,2}, Catherine Paugam-Burtz³, Thomas Godet¹, Linda Khoy-Ear³, Sacha Rozencwajg³, Jean-Marc Delay⁴, Daniel Verzilli⁴, Jeremie Dupuis¹, Gerald Chanques^{4,6}, Jean-Etienne Bazin¹, Jean-Michel Constantin^{1,2}, Bruno Pereira⁵, Samir Jaber^{4,6*} and OPERA study investigators

220 patients inclus dans la période post-opératoire de chirurgie abdominale et à risque de complications respiratoires



IRA après chirurgie abdominale: HFNO vs O2 standard

Outcomes	No./total no. (%)		ARR or between-group difference (95 % CI)	p value
	Usual care	HFNC oxygen therapy		
Primary outcomes				
Postoperative hypoxaemia ^{a,b}				
1 h after extubation	27/112 (24)	23/108 (21)	-3 (-14 to 8)	0.62
After discontinuation of the study treatment	34/112 (30)	29/108 (27)	-4 (-15 to 8)	0.57
Secondary outcomes				
Need for supplemental oxygen therapy after treatment discontinuation	92/112 (82)	79/108 (73)	-9 (-20 to 2)	0.11
Pulmonary complications ^c within 7 days				
Grade 1 or 2	49/112 (44)	37/108 (34)	-10 (-25 to 4)	0.17
Grade ≥ 3	19/112 (17)	21/108 (20)	2 (-8 to 13)	0.63
Bronchial congestion	14/112 (13)	16/108 (15)	2 (-7 to 11)	0.62
Hypoxaemia ^d	30/112 (27)	30/108 (28)	0 (-11 to 13)	0.87
Pneumonia	10/112 (9)	10/108 (9)	0 (-7 to 8)	0.93
Need for intubation or NIV for respiratory failure ^e	14/112 (13)	20/108 (19)	6 (-4 to 16)	0.22
Surgical reoperation within 7 days ^f	5/112 (4)	2/108 (2)	-3 (-7 to 2)	0.45
Unexpected ICU admission	16/112 (14)	16/108 (15)	0 (-9 to 10)	0.91
ICU length of stay (days)	5 (3-13)	6 (4-16)	3 (-5 to 12)	0.53
Hospital length of stay (days)	11 (7-18)	12 (7-20)	0.5 (-3.5 to 4.5)	0.58
In-hospital mortality	3/112 (3)	2/108 (2)	-1 (-5 to 3)	0.68

NS

IRA après chirurgie abdominale: timing arrêt sédation

Immediate interruption of sedation compared with usual sedation care in critically ill postoperative patients (SOS-Ventilation): a randomised, parallel-group clinical trial

Gerald Chanques, Matthieu Conseil, Claire Roger, Jean-Michel Constantin, Albert Prades, Julie Carr, Laurent Muller, Boris Jung, Fouad Belafia, Moussa Cissé, Jean-Marc Delay, Audrey de Jong, Jean-Yves Lefrant, Emmanuel Futier, Grégoire Mercier, Nicolas Molinari, Samir Jaber, on behalf of the SOS-Ventilation study investigators*

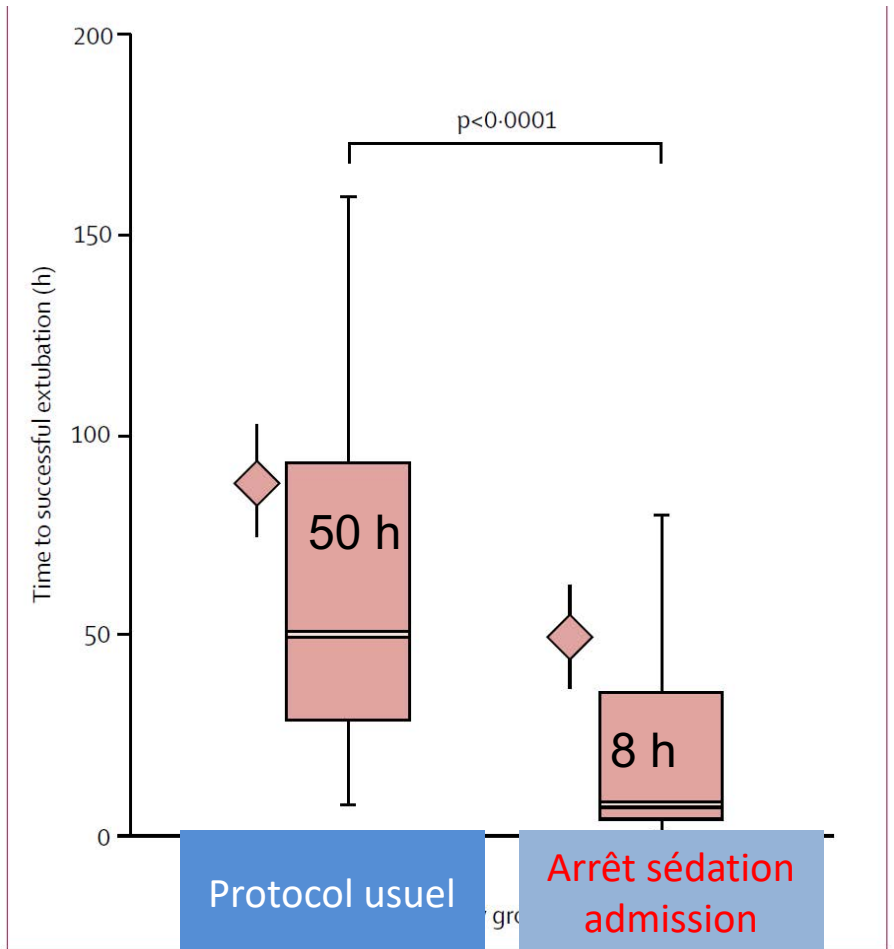


137 patients admis en réanimation après chirurgie abdominale

Protocol usuel

Arrêt sédation admission

Délais d'extubation



IRA après chirurgie abdominale: quality improvement programme

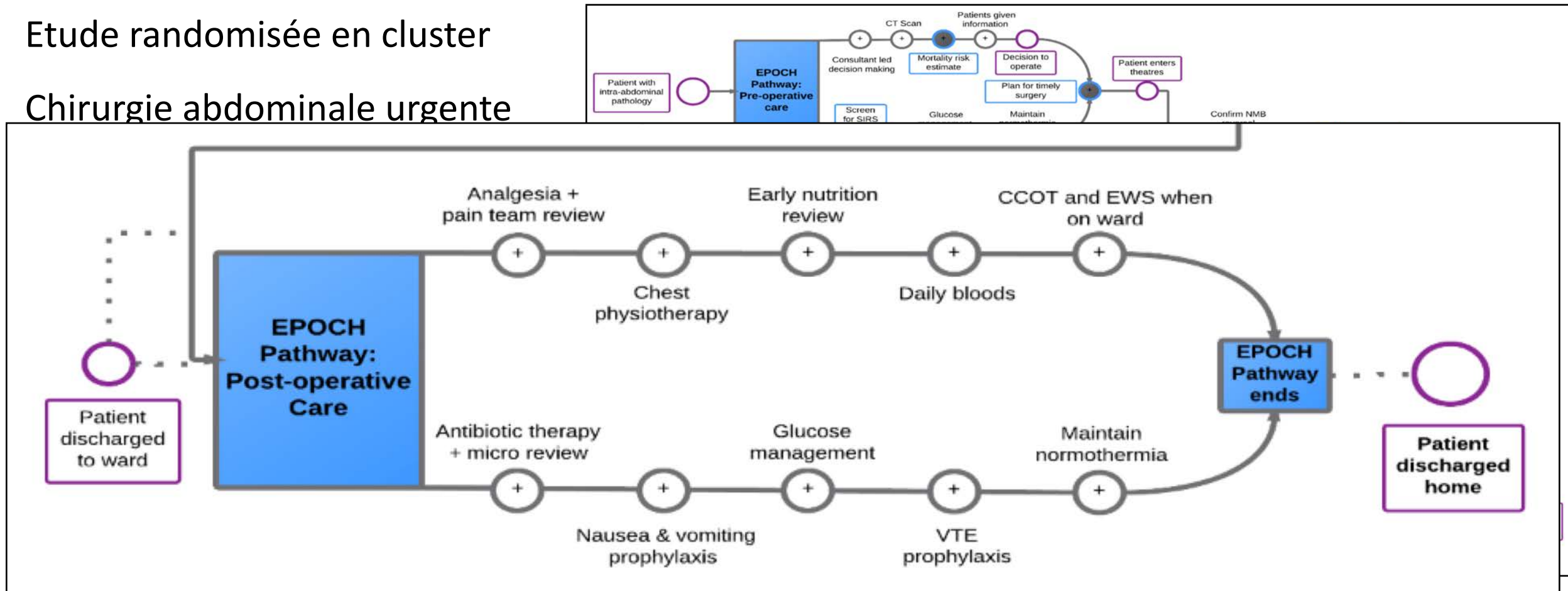
Effectiveness of a national quality improvement programme to improve survival after emergency abdominal surgery (EPOCH): a stepped-wedge cluster-randomised trial



Lancet 2019

Carol J Peden, Tim Stephens, Graham Martin, Brennan C Kahan, Ann Thomson, Kate Rivett, Duncan Wells, Gerry Richardson, Sally Kerry, Julian Bion, Rupert M Pearse, on behalf of the Enhanced Peri-Operative Care for High-risk patients (EPOCH) trial group*

- Etude randomisée en cluster
- Chirurgie abdominale urgente

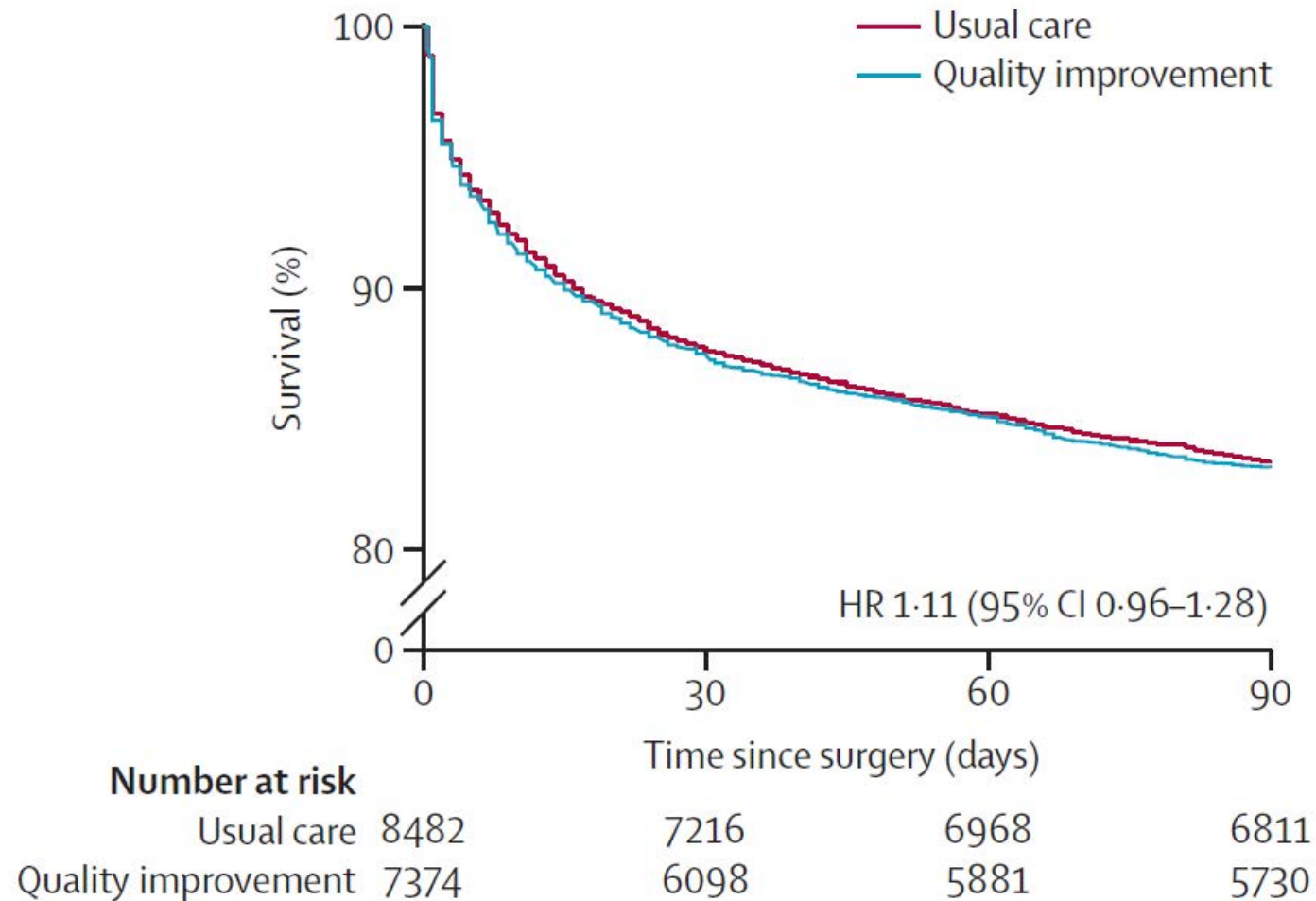


IRA après chirurgie abdominale: quality improvement programme

Effectiveness of a national quality improvement programme to improve survival after emergency abdominal surgery (EPOCH): a stepped-wedge cluster-randomised trial



Carol J Peden, Tim Stephens, Graham Martin, Brennan C Kahan, Ann Thomson, Kate Rivett, Duncan Wells, Gerry Richardson, Sally Kerry, Julian Bion, Rupert M Pearse, on behalf of the Enhanced Peri-Operative Care for High-risk patients (EPOCH) trial group*



Conclusions

- **Pancréatite aigüe**
 - Dysfonction d'organe et leur évolution temporelle
 - Péridurale thoracique ?
 - Pas de CPRE sauf si angiocholite
 - Privilégier les techniques mini invasives de nécrosectomie
- **Infections intra-abdominales**
 - Durée d'antibiothérapie des PPO: 8 jours
 - Ecologie bactérienne +++ selon géographie
- **Insuffisance hépatique en réanimation**
 - Admission des patients cirrhotiques en réanimation (réévaluation précoce)
 - RFE 2018
- **Hémorragie digestive**
 - Pas d'IPP (systématique) ?
- **Nutrition**
 - NE 1,0 vs 1,5 kcal/ml ne modifie pas.... la mortalité (est-ce l'effet recherché ?)
- **Insuffisance respiratoire aigüe et Chirurgie abdominale**
 - Arrêt précoce des sédatations
 - HFNO = O2