Sat. Mar 2, 2019

第2会場

海外招請講演

[IL(E)11] 海外招請講演11
座長:黒田 泰弘(香川大学医学部附属病院救命救急センター)
8:45 AM - 9:35 AM 第2会場 (国立京都国際会館2F Room A)

[IL(E)11] Neurocritical care 2019: Recent advances and future frontiers
Stephan A. Mayer （Henry Ford Health System and the Mount Sinai Health System, USA）

海外招請講演

[IL(E)12] 海外招請講演12
座長:射場 敏明(順天堂大学医学部附属 順天堂医院救急・災害医学)
9:40 AM - 10:30 AM 第2会場 (国立京都国際会館2F Room A)

[IL(E)12] Sepsis: New insights into pathophysiology and a sneak preview to future therapy
Thomas van der Poll （Amsterdam University Medical Centers, University of Amsterdam, Netherlands）

海外招請講演

[IL(E)13] 海外招請講演13
座長:佐藤 直樹(日本医科大学武蔵小杉病院内科・循環器内科・集中治療室)
10:35 AM - 11:25 AM 第2会場 (国立京都国際会館2F Room A)

[IL(E)13] High sensitivity cardiac troponin assays: How they are being used across the world for the evaluation of patients with suspected acute coronary syndromes ― Possible implications for Japan
Richard Michael Nowak （Henry Ford Hospital, USA）

海外招請講演

[IL(E)14] 海外招請講演14
座長:林 淑朗(医療法人鉄蕉会亀田総合病院集中治療科)
2:00 PM - 2:50 PM 第2会場 (国立京都国際会館2F Room A)

[IL(E)14] An update of the subtleties of infection management in the ICU
Jeffrey Lipman （The University of Queensland Centre for Clinical Research, Australia）

海外招請講演

[IL(E)15] 海外招請講演15
座長:川前 金幸(国立大学法人山形大学医学部附属病院麻酔科)
2:55 PM - 3:45 PM 第2会場 (国立京都国際会館2F Room A)

[IL(E)15] Severe viral pneumonia: Significant?
Younsuck Koh （Asan Medical Center, University of Ulsan, Korea）

海外招請講演

[IL(E)16] 海外招請講演16
座長:三高 千恵子(順天堂大学大学院 麻酔科学)
3:50 PM - 4:40 PM 第2会場 (国立京都国際会館2F Room A)

[IL(E)16] Pick your syndrome: PICS or PIICS
Heatherlee Bailey （President Elect of SCCM）

第5会場

海外招請講演

[IL(E)17] 海外招請講演17
座長:稲葉 英夫(金沢大学附属病院救命センター)
8:45 AM - 9:35 AM 第5会場 (国立京都国際会館1F Room D)

[IL(E)17] Volume management in ICU patients
Sung Jin Hong （Catholic University of Korea Yeouido St. Mary's Hospital, Korea）

海外招請講演

[IL(E)18] 海外招請講演18
座長:丸藤 哲(医療法人 徳洲会 札幌東徳洲会病院救急センター)
9:40 AM - 10:30 AM 第5会場 (国立京都国際会館1F Room D)

[IL(E)18] End-of-life care, decision making and palliative care
Jozef Kesecioglu （University Medical Center Utrecht, Netherlands）

第6会場

海外招請講演

[IL(E)19] 海外招請講演19（日本語）
座長:森崎 浩(慶應義塾大学医学部麻酔学教室)
4:05 PM - 4:55 PM 第6会場 (国立京都国際会館1F スワン)

[IL(E)19] Extracellular vesicles: ARDSと敗血症の新しいターゲット
高田 正雄 （Imperial College London, UK）

海外招請講演

[IL(E)11] 海外招請講演11

座長:黒田 泰弘(香川大学医学部附属病院救命救急センター)

Sat. Mar 2, 2019 8:45 AM - 9:35 AM 第2会場 (国立京都国際会館2F Room A)

共催:アイ・エム・アイ株式会社

[IL(E)11] Neurocritical care 2019: Recent advances and future frontiers

Stephan A. Mayer （Henry Ford Health System and the Mount Sinai Health System, USA）

(Sat. Mar 2, 2019 8:45 AM - 9:35 AM 第2会場)

[IL(E)11] Neurocritical care 2019: Recent advances and future frontiers

Stephan A. Mayer （Henry Ford Health System and the Mount Sinai Health System, USA）

【 同時通訳付き】

Stephan A. Mayer, MD, FCCM, is a practicing neurointensivist and the William T. Gossett Chair of Neurology for the Henry Ford Health System in Detroit, Michigan. Prior to that Dr. Mayer was Director of Neurocritical Care for the Mount Sinai Health System in New York, where he also founded the Institute for Critical Care Medicine at the Icahn School of Medicine. Prior to that he was Professor of Neurology and Neurological Surgery at Columbia University College of Physicians and Surgeons in New York, NY.

Dr Mayer earned his medical degree from Cornell University Medical College in New York City. He completed a residency in neurology and a fellowship in critical care neurology at the Neurological Institute of New York, Columbia-Presbyterian Medical Center. He is board certified in neurology and neurocritical care, and was a founding member and is past-president of the Neurocritical Care Society.

Dr. Mayer has published more than 240 original research articles, 180 review articles, 340 abstracts, and written or edited eight books, including the most recent edtion of Merritt’ s Textbook of Neurology, considered a standard text in the field. He was principal investigator of the FAST Trial, a worldwide multicenter clinical trial evaluating ultra-early hemostatic therapy for brain hemorrhage, and served as principal investigator of the NIH-funded New York Presbyterian Hospital hub of the Neurological Emergencies Treatment Trials (NETT) network and the Columbia University Outcomes Project. His work in helping victims of severe brain injury has been featured in the Wall Street Journal and the book Cheating Death, by CNN medical correspondant Dr. Sanjay Gupta.

海外招請講演

[IL(E)12] 海外招請講演12

座長:射場 敏明(順天堂大学医学部附属 順天堂医院救急・災害医学)

Sat. Mar 2, 2019 9:40 AM - 10:30 AM 第2会場 (国立京都国際会館2F Room A)

共催:日本製薬株式会社

[IL(E)12] Sepsis: New insights into pathophysiology and a sneak preview to future therapy

Thomas van der Poll （Amsterdam University Medical Centers, University of Amsterdam, Netherlands）

(Sat. Mar 2, 2019 9:40 AM - 10:30 AM 第2会場)

[IL(E)12] Sepsis: New insights into pathophysiology and a sneak preview to future therapy

Thomas van der Poll （Amsterdam University Medical Centers, University of Amsterdam, Netherlands）
【 同時通訳付き】

Curriculum vitae (September 2018)

Name Tom van der Poll
Date of birth March 20, 1961
Nationality Dutch
Sex Male

Current and recent positions

12/2016 Chair, Department of Medicine, Academic Medical Center, University of Amsterdam, the Netherlands.

01/2011 – 12/2016 Head, Division of Infectious Diseases, Academic Medical Center, University of Amsterdam, the Netherlands.

01/2007 – 12/2016 Head, Center for Experimental and Molecular Medicine, Academic Medical Center, University of Amsterdam, the Netherlands.

03/2003 Professor of Medicine, University of Amsterdam, the Netherlands.

Education and experience

Board Certified Infectious Diseases May 15, 2000

Board Certified Internal Medicine December 15, 1991
Resident Internal Medicine 1986 – 1991, Academic Medical Center, Amsterdam, the Netherlands

PhD title October 10, 1991 [University of Amsterdam]
Thesis: "Tumor necrosis factor: biologi¬cal responses in humans"

Medical degree November 1986
Medical School, University of Amsterdam 1978 – 1986
Registration (BIG) number: 19023304301

Other activities
• Council member and past Chair of the International Sepsis Forum
• Supervisor (“Promoter”) of 64 succesfully completed PhD projects
• Principal Investigator of >50 research grants
• Member of advisory boards and steering committees of several pharmaceutical companies
• Member of Data Safety Monitoring Boards and Clinical Evaluation Committees of several trials on sepsis, pneumonia and rheumatoid arthritis

Web of Science report:
911 publications; 39,371 citations; 4,223 times in 2017
Hirsch index 98

Selected publications (most recent 10 years)

1. Scicluna B.P., van Vught L.A., Zwinderman A.H., Wiewel M.A., Davenport E.E., Burnham K.L., Nürnberg P., Schultz M.J., Horn J., Cremer O.L., Bonten M.J., Hinds C.J., Wong H.R., Knight J.C., van der Poll T. Classification of sepsis patients as blood genomic endotypes: a prospective cohort study. Lancet Respiratory Medicine 2017; 5: 816-826.
2. Van der Poll T., van de Veerdonk F.L., Scicluna B.S., Netea M.G. The immunopathology of sepsis and potential therapeutic targets. Nature Reviews Immunology 2017; 17(7):407-420.
3. Van Vught L.A., Wiewel M.A., Hoogendijk A.J., Frencken J.F., Scicluna B.P., Klein Klouwenberg P.M., Zwinderman A.H., Lutter R., Horn J., Schultz M.J., Bonten M.M., Cremer O.L., van der Poll T. The host response in sepsis patients developing Intensive Care Unit-acquired secondary infections. Am. J. Respir. Crit. Care Med. 2017; 196: 458-470.
4. Van Vught L.A., Klein Klouwenberg P.M.C., Spitoni C., Scicluna B.P., Wiewel M.A., Horn J., Schultz M.J., Nü rnberg P., Bonten M.J.M, Cremer O.L., van der Poll T; on behalf of the MARS consortium. Incidence, risk factors and attributable mortality of secondary infections in the intensive care unit after admission for sepsis. JAMA 2016; 315: 1469-79.
5. van Vught L.A., Scicluna B.P., Wiewel M.A., Hoogendijk A.J., Klein Klouwenberg P.M., Franitza M., Toliat M.R., Nürnberg P., Cremer O.L., Horn J., Schultz M.J., Bonten M.M., van der Poll T. Comparative analysis of the host response to community-acquired and hospital-acquired pneumonia in critically ill patients. Am. J. Respir. Crit. Care Med. 2016; 194:1366-1374.
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7. Cheng S.C., Scicluna B.P., Arts R.J.W., Gresnigt M.S., Lachmandas E., Giamarellos-Bourboulis E.J., Kox M., Manjeri G.R., Wagenaars J., Cremer O.L., Leentjens J., van der Meer A.J., van de Veerdonk F., Bonten M.J., Schultz M.J., Willems P., Pickkers P., Joosten L.A.B., van der Poll T.*, Netea M.G.* (*shared senior authorship). Broad defects in energy metabolism of leukocytes underlie immunoparalysis in sepsis. Nature Immunology 2016; 17: 406-13.
8. Scicluna B.P., Klein Klouwenberg P.M., van Vught L.A., Wiewel M.A., Ong D.S., Zwinderman A.H., Franitza M., Toliat M.R., Nürnberg P., Hoogendijk A.J., Horn J., Cremer O.L., Schultz M.J., Bonten M.J., van der Poll T. A Molecular biomarker to diagnose community-acquired pneumonia on Intensive Care Unit admission. Am. J. Respir. Crit. Care Med. 2015; 192:826-835.
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15. Wiersinga W.J., Wieland C.W., Dessing M.C., Chantratita N., Cheng A.C., Limmathurotsakul D., Chierakul W., Leendertse M., Florquin S., de Vos A.F., White N., Dondorp A.M., Day N.P., Peacock S.J., van der Poll T. Toll-like receptor 2 impairs host defense in gram-negative sepsis caused by Burkholderia pseudomallei (melioidosis). PLoS Medicine 2007; 4: e248.

Bibliography

Tom van der Poll is Professor of Medicine and Chair of the Department of Medicine in the Amsterdam University Medical Centers, location Academic Medical Center, University of Amsterdam, the Netherlands. Van der Poll is board certified in Internal Medicine and Infectious Diseases. His training included a postdoctoral research fellowship in Cornell University Medical College in New York (1993-1995). Van der Poll’ s research focuses on pneumonia and sepsis, particularly on pathogenesis, the host response and biomarkers. He published >800 articles on this topic. Van der Poll has served as a member of Data Safety and Clinical Monitoring Boards of several pivotal phase III sepsis and pneumonia trials evaluating immunomodulatory agents.

The sepsis-associated host response is characterized by concurrent excessive inflammatory, catabolic, metabolic and immune suppressive features, and a failure to return to homeostasis, which oftentimes results in a condition referred to as chronic critical illness. The understanding of key mechanisms involved in the pathogenesis of sepsis has increased tremendously, yet this still needs to be translated into novel targeted therapeutic strategies. Pivotal for the clinical development of new sepsis therapies is selection of patients based on biomarkers and/or functional defects that provide specific insight in the expression or activity of the therapeutic target. Future research should focus the discovery and validation of biomarkers that reflect predominant pathophysiological mechanisms at different body sites and can guide selection of patients for targeted therapies and the monitoring thereof.

海外招請講演

[IL(E)13] 海外招請講演13

座長:佐藤 直樹(日本医科大学武蔵小杉病院内科・循環器内科・集中治療室)

Sat. Mar 2, 2019 10:35 AM - 11:25 AM 第2会場 (国立京都国際会館2F Room A)

[IL(E)13] High sensitivity cardiac troponin assays: How they are being used across the world for the evaluation of patients with suspected acute coronary syndromes — Possible implications for Japan

Richard Michael Nowak （Henry Ford Hospital, USA）

(Sat. Mar 2, 2019 10:35 AM - 11:25 AM 第2会場)

[IL(E)13] High sensitivity cardiac troponin assays: How they are being used across the world for the evaluation of patients with suspected acute coronary syndromes — Possible implications for Japan

Richard Michael Nowak （Henry Ford Hospital, USA）

【 同時通訳付き】

EDUCATION:

Michael Power High School1961 - 1966
Toronto, Ontario
Senior Matriculation (Grade 13)

University of Toronto1966 - 1968
Pre-Medicine
Toronto, Ontario, Canada

University of Toronto1968 - 1972
Medical School
Medical Doctor
Toronto, Ontario, Canada

Executive MBA Program1988 - 1990
Michigan State University
Business School
Broad Graduate School of Management
East Lansing, Michigan
Masters Business Administration
Member, Beta Gamma Sigma

GRADUATE TRAINING:

Montreal General Hospital1972 - 1973
Montreal, Quebec
Straight Medicine

Research Fellow1974 - 1975
Clinical Science Division
University of Toronto

LICENSURE AND CERTIFICATION:

National Board of Medicine Examinations1972

College of Physicians and Surgeons of Ontario1972 - 1976
1985 - 2013

California State Medical Licensure1973 - present

Michigan State Medical Licensure1975 - present

Diplomate of the American Board of Emergency Medicine1981 - 1991

Recertification - American Board of Emergency Medicine1991 - 2001
2001 - 2011
2011 - 2021

Fellow, American College of Emergency Physician1982 - present

Fellow, American Academy of Emergency Medicine2000 - present

HOSPITAL AND STAFF APPOINTMENTS:

Staff Physician1973 - 1974
Emergency Department
Belleville General Hospital
Belleville, Ontario

Staff Physician1974 - 1975
(East York Medical Emergency Group)
Emergency Department
Toronto East General Hospital
Toronto, Ontario

Senior Staff1975 - present
Division/Department of Emergency Medicine
Henry Ford Hospital
Detroit, Michigan

Associate Head 1981 - 1983
Division of Emergency Medicine
Henry Ford Hospital
Detroit, Michigan

Vice Chairperson1983 - 1988
Department of Emergency Medicine

Henry Ford Hospital
Detroit, Michigan

Associate Staff1989 - 1994
Emergency Medicine 2007 - present
Cottage Hospital
Grosse Pointe Farms, Michigan

Chairperson1988 - 1992
Department of Emergency Medicine
Henry Ford Hospital
Detroit, Michigan

Vice Chairperson1992 - 2006
Department of Emergency Medicine
Henry Ford Hospital
Detroit, Michigan

Past Chairperson 2006 - present
Department of Emergency Medicine
Henry Ford Hospital
Detroit, Michigan

High sensitivity cardiac troponin (hs-cTn) assays (as defined by the International Federation of Clinical Chemists) since 2015 have been recommended by the European Society of Cardiology (ESC) for the rapid (very low baseline value or the use of a 1 hour delta threshold value algorithm) rule-out and rule-in of acute myocardial infarction (AMI) in selected patients (chest pain complaint, symptoms of We have very recently reported the results of a single center US trial (REACTION-US) assessing the use of the ESC recommended hs-cTnT (Roche Diagnostics) rapid 1 hour or less rule-out and rule-in AMI algorithm for all patients presenting with any suspicious symptoms. The rapid rule-out assessment results are very similar (high negative predicted values and sensitivities) but the rule-in assessments are significantly different with lower positive predictive values and specificities for AMI in the US when compared to the hs-cTnT algorithm currently used in Europe.
A large US multicenter study (HIGH U.S.) assessing the use of a hs-cTnI assay (Siemens Diagnostics) as recommended by the ESC published rapid assessment guidelines but enrolling all comers with symptoms suspicious for AMI has been recently completed. The initial results in this patient population with many risk factors for coronary artery disease show similarly very high negative predicted values and sensitivities but lower and inadequate positive predictive values for AMI when using the ESC guidelines for this specific assay.

Given the combination of the European and more limited US data available there is movement in the US to utilize hs-cTn assays for the rapid rule-out of AMI (approximately 50 centers have implemented this approach) and for safe discharge when combined with a risk-stratification tool. This strategy will provide more efficient care and will lower costs for the evaluation for all patients presenting to the ED with any symptoms suspicions for AMI while maintaining a rate of missed AMI of less than one percent of patients. The algorithms for the rapid rule-in of AMI with appropriately high positive predictive values and specificities are most likely going to be determined in individual medical centers.

In Japan the use of hs-cTn assays for the evaluation of all patients with any symptoms suspicious for AMI would be helpful in all grades (urgent, emergency and critical care) of Emergency Medical care. More specifically this strategy would provide accurate rapid rule-out assessments for AMI. Given the experiences in Europe and the US it may not be necessary to validate this approach in a multicenter Japanese study.

海外招請講演

[IL(E)14] 海外招請講演14

座長:林 淑朗(医療法人鉄蕉会亀田総合病院集中治療科)

Sat. Mar 2, 2019 2:00 PM - 2:50 PM 第2会場 (国立京都国際会館2F Room A)

[IL(E)14] An update of the subtleties of infection management in the ICU

Jeffrey Lipman （The University of Queensland Centre for Clinical Research, Australia）

(Sat. Mar 2, 2019 2:00 PM - 2:50 PM 第2会場)

[IL(E)14] An update of the subtleties of infection management in the ICU

Jeffrey Lipman （The University of Queensland Centre for Clinical Research, Australia）

【 同時通訳付き】

Professor Jeffrey Lipman received his medical degree (MBBCh) from the University of Witwatersrand, South Africa and has specialist qualifications in anaesthesia (DA, FFA) and intensive care (FFA Crit Care, FCICM). Professor Lipman is Professor and Head of Anaesthesiology and Critical Care, University of Queensland and also is the Executive Director of the Burns, Trauma, Critical Care Research Centre at this University. He has Professorial attachments at QUT, University of New South Wales, Chinese University of Hong Kong and his Alma Mater, University of Witwatersrand.
He is a career Intensivist, having worked full-time in Intensive Care Units since 1979. His research interests include all aspects of infection management in intensive care. He has a special interest in the pharmacokinetics of antibiotics, an area in which he completed his MD through the Chinese University of Hong Kong where he still holds an Adjunct Professorial position.
He has published over 30 book chapters and over 500 peer-reviewed articles including in high impact journals like NEJM, JAMA and Lancet Infectious Diseases.
He has been an invited speaker to over 100 Congresses Nationally and Internationally, being a Keynote speaker in many countries around the world.

Sepsis is one of the leading causes of mortality and morbidity in the patients admitted to intensive care units (ICU). Despite evolving concepts and advances in management, the mortality associated with sepsis remains unexpectedly high. Early and appropriate antibiotic therapy has been the mainstay of treatment. There are however many unspoken subtleties in managing critically ill patients.
Firstly antibiotics (particularly broad spectrum) cause “collateral damage”, killing “good” commensal bacteria allowing resistant bowel organisms to grow. Currently the various syndromes we label as sepsis are often vague and poorly defined, predisposing to over use of antibiotics in inflammatory syndromes the causation of which may not be “infective”. New diagnostic genomic testing of host (patient) white cell mRNA may help differentiate the infective syndromes from other similar inflammatory conditions (1). A “watch and wait” philosophy for antibiotic initiation in the ICU in patients that are not acutely deteriorating has in fact been show to improve outcomes over a period of time (2). The importance of source control in managing patients with sepsis cannot be overemphasised (3). Finally, the longer a course of antibiotics is administered, the more the development of resistant bacterial overgrowth within the patients’ bowel, so shorter courses of antibiotics should be embarked upon where appropriate (4,5).

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海外招請講演

[IL(E)15] 海外招請講演15

座長:川前 金幸(国立大学法人山形大学医学部附属病院麻酔科)

Sat. Mar 2, 2019 2:55 PM - 3:45 PM 第2会場 (国立京都国際会館2F Room A)

[IL(E)15] Severe viral pneumonia: Significant?

Younsuck Koh （Asan Medical Center, University of Ulsan, Korea）

(Sat. Mar 2, 2019 2:55 PM - 3:45 PM 第2会場)

[IL(E)15] Severe viral pneumonia: Significant?

Younsuck Koh （Asan Medical Center, University of Ulsan, Korea）

【 同時通訳付き】

Dr. Koh is a physician scientist working as a Professor of Department of Pulmonary and Critical Care Medicine, a Professor of Department of Medical Humanities &Social Sciences, and a critical care physician at Asan Medical Center, the University of Ulsan College of Medicine in Korea. His research interests include ARDS, mechanical ventilation, sepsis, and medical ethics. He has published more than 360 articles in peer review journals.
He had served medical academy societies as a President of Korean Society of Critical Care Medicine, and as a President of the Korean Society for Medical Ethics. He also had served as an organizing chairman of the 12th World Federation of Societies of Intensive and Critical Care Medicine (WFSICCM) Congress in 2015, as a council of the WFSICCM for 8 years, and as a chairman of the Asian Collaboration of Critical Care Trial Group. He has been contributing to enhance mechanical ventilation cares in Asia as ex-chairman of Asian Ventilation Forum.

The pandemics of SARS, Avian influenza, new H1N1 influenza, and Middle East Respiratory Syndrome (MERS) awakened medical societies to the viral threat on respiratory failure. However, respiratory viruses, even a seasonal influenza virus, still have not been considering as a major cause of respiratory failure in adults. Clinician’ s under-recognition on viral causes is especially true in healthcare-associated pneumonia (HCAP). Moreover, neglect on viral causes lead to unnecessary antibiotic uses together with unnecessary multiple laboratory tests in viral pneumonia.
Several recent reports on adult viral infection showed that viruses accounted for approximately 13.5 to 56.2% of the cases of community acquired pneumonia (CAP). Rhinovirus, parainfluenza virus, influenza virus, respiratory syncytial virus and human metapneumovirus are major causes of viral pneumonia. Herpes simplex virus bronchopneumonia was not rare in nonimmuno-compromised patients with prolonged mechanical ventilation. Bacterial co-infections in viral pneumonias also are not rare. Virus infections seem to impair host immunity leading to secondary bacterial infections.
Clinical suspicion on a viral cause in a patient with lung infiltrates is the mainstay for the early detection. Clinical manifestations, chest radiography findings, and RT-PCR findings using nasopharyngeal or low respiratory specimen are considered together when a diagnosis is made. Early detection is crucial for better outcome of influenza pneumonia, because the limited antiviral agents are effective in early stage of the illness. Steroid administration seems to be harmful in influenza pneumonia. Low tidal volume of mechanical ventilation showed better outcome in new H1N1 influenza pneumonia than large tidal volume of mechanical ventilation. The mortalities of patients with respiratory failure caused by bacterial, viral, and bacterial-viral co-infections do not seem to be different. In conclusion, the clinical impact of respiratory viruses on respiratory failure is significant. Considering enormous burden on public health resources of viral pneumonia, further efforts should be devoted to establish the proper diagnosis measures and antiviral drugs development.

海外招請講演

[IL(E)16] 海外招請講演16

座長:三高 千恵子(順天堂大学大学院 麻酔科学)

Sat. Mar 2, 2019 3:50 PM - 4:40 PM 第2会場 (国立京都国際会館2F Room A)

[IL(E)16] Pick your syndrome: PICS or PIICS

Heatherlee Bailey （President Elect of SCCM）

(Sat. Mar 2, 2019 3:50 PM - 4:40 PM 第2会場)

[IL(E)16] Pick your syndrome: PICS or PIICS

Heatherlee Bailey （President Elect of SCCM）

【 同時通訳付き】

Dr Heatherlee Bailey completed medical school at the University of Medicine and Dentistry of New Jersey in Newark, NJ – now known as Rutgers. She undertook a residency in Emergency Medicine at the Medical College of Pennsylvania in Philadelphia, Pennsylvania and then joined their faculty. After a faculty fellowship in critical care, she served as her Department’ s Director of Critical Care Education and their Associate Residency Program Director for a decade. MCP merged with Hahnemann University and is now known as Drexel University. Twelve years later, Dr. Bailey’ career brought her to Duke University as well as the Durham VA Medical Center in North Carolina.

Her career has been rooted in education, trainee development, and mentorship. Mentorship is a focus that Heather has brought to her roles at SCCM. Her dedication and expertise has also been nationally recognized by the American Medical Association as they bestowed their Women’ s Mentoring Award upon her in 2008.

Given her prominence in the field, Dr. Bailey serves as an Oral Board Examiner for the American Board of Emergency Medicine. Her career interests in the management of injury and critical illness span the globe. She was a key developer of the Comprehensive Trauma Life Course for India as part of her work for the International Trauma Anesthesia and Critical Care Society.

Dr. Bailey has been actively involved in SCCM for more than 20 years serving in a wide variety of roles. No stranger to leadership, she served as a local Chapter President from 2003-2005. She was awarded the Dr Joseph and Rae Brown award for her Chapter level contributions in 2008. Fellowship in the American College of Critical Care Medicine followed in 2009 which was in turn followed by election to Council, the governing body for the society. Br. Bailey’ s path of volunteerism, mentorship and leadership has led her to be the first Emergency Medicine trained President of SCCM.

Acronyms are commonplace in medicine. It can be very challenging to be aware of all current acronyms. While there is occasional overlap, there typically is not almost identical phrasing that leads to different syndromes with near identical acronyms such as PIICS and PICS.
Persistent inflammation, immunosuppression and catabolism syndrome (PIICS) is a term initially generated by surgical intensivists to describe surgical ICU patients that survive their initial course of sepsis, trauma or other disease entity that have prolonged stays from persistent immune dysfunction. Unfortunately, this is a common state that is rarely reversible, and many patients end up in long term facilities or dying from this entity. PIICS is marked by persistent loss of lean body mass, failure to rehabilitate, sepsis recidivism, rehospitalization and increasing dependence and a slow prolonged path to death. The causes, mechanisms, and reasons for PIICS are largely unexplained. PIICS is an entity of non-survivors.
Survivors of critical illness that exhibit impairment in cognition, mental health and physical function is known as post-intensive care syndrome (PICS). Each of these elements is related to critical illness and the care that is required. The mental health of family members may also be affected and is termed PICS-Family (PICS-F). In the US almost 6 million patients are admitted to an ICU annually. Slightly less than 5 million will survive their ICU course. It is estimated that at least 50% will suffer from at least one component of PICS. Those that receive life support measures tend to have a persistence in PICS symptoms even at 12 months after their discharge from the ICU. SCCM is addressing how ICU care impacts long term outcomes with the ICU Liberation and Thrive programs. ICU Liberation focuses on the ABCDEF bundle for achieving better

outcomes in the ICU. Poorly managed pain, agitation and delirium (PAD) lead to longer ICU stays, increased cost and these patients have a higher incidence of long term physical and cognitive dysfunction. It has been shown that improved bundle compliance leads to higher odds of survival. The Thrive initiative focuses on peer support through the use of collaborative groups. There are several different templates that have been initiated with success across the US, UK and Australia.
It is clear that PIICS and PICS are totally different entities. If heard out of context it might be very confusing to know which process is being referred to. Though once some background is given, it should be relatively clear as one typically leads to death (PIICS) and the other is associated with issues of surviving critical illness (PICS). What is apparent is that more research is required for both entities to learn the best way to mitigate them. Which in turn will hopefully lead to a PICCS/PICS free ICU setting.

海外招請講演

[IL(E)17] 海外招請講演17

座長:稲葉 英夫(金沢大学附属病院救命センター)

Sat. Mar 2, 2019 8:45 AM - 9:35 AM 第5会場 (国立京都国際会館1F Room D)

[IL(E)17] Volume management in ICU patients

Sung Jin Hong （Catholic University of Korea Yeouido St. Mary's Hospital, Korea）

(Sat. Mar 2, 2019 8:45 AM - 9:35 AM 第5会場)

[IL(E)17] Volume management in ICU patients

Sung Jin Hong （Catholic University of Korea Yeouido St. Mary's Hospital, Korea）

【 同時通訳付き】

Institute / Position
Catholic University of Korea, College of Medicine,
Department of Anesthesiology, Pain and Critical Care Medicine
Professor
Education and Certification
1994: PhD (the Graduate School of Catholic University of Korea, College of Medicine)
1985: MD (Catholic University of Korea, College of Medicine)
2009: Subspecialty board for critical care medicine (Korean society of Critical Care medicine)
1989: Professional license of Anesthesiologist (Korean Society of Anesthesiologists)
Experience
Aug. 1996 - Aug 1997: Research Fellow of the Center of Anesthesiology Research in Cleveland Clinic Foundation (Ohio)
Mar. 2014 – Feb. 2018: Chairman of the Department of Anesthesiology, Pain and Critical Medicine, Catholic University of Korea, College of Medicine
Since 1989 to present: Faculty member of the Department of Anesthesiology, Pain and Critical Medicine, Catholic University of Korea, College of Medicine
Social Activity
President of the Korean Society of Critical Care Medicine (since 2018 to present)
Vice President of Seoul Medical Association (since 2018 to present)
Vice President of the Korean Society of Critical Care Medicine (since 2016 to 2018)
Director of Publication in the Korean Society of Critical Care Medicine/ Editor- in-Chief of the Korean Journal of Critical Care Medicine (since 2008 to 2016)
Director of Social Communication in the Korean Society of Anesthesiologists (since 2014 to 2016)
Director of Medicolegal Affairs in the Korean Society of Anesthesiologists (since 2010 to 2012)
Director of Scientific Affairs in Seoul Medical Association (since 2009 to 2012)

Striking the right balance between under- and over-resuscitation is a key part of volume management. However, assessing the degree of hypovolemia is difficult because of lack reliable clinical parameters. Many patients admitted to intensive care units are hypovolemic with heterogeneous pathophysiology. What fluid, and how much should we give to them? This review is focused on the recent advances and ongoing controversies about volume management in ICU patients.
Under steady state, the sub-glycocalyceal fluid with low oncotic pressure acts as a barrier between plasma and interstitial fluid. The plasma osmotic pressure moves sub-glycocalyceal fluid rather than the interstitial fluid. Theoretically, only 1/4 to 1/5 of the administered crystalloid solution should remain in the blood vessel, but indeed more fluid remains in intravascular space. The glycocalyceal layer is vulnerable to damage in ischemia and hypoxia. Maintaining and restoring the glycocalyx is an important concept of the fluid therapy.
When we judge the patient's volume status, we do not measure directly the plasma volume, instead we make a guess based on various clinical symptoms and parameters. The primary goal of the fluid administration is to restore the preload, but the ultimate goal is to improve the tissue perfusion and oxygen delivery, so the factors that determine the cardiac output and microcirculation should be considered.
The choice of fluid in ICU patients with various pathophysiology should be tailored to the individual

condition. Studies have concluded that colloids do not improve survival rates and are not cost-effective. Furthermore, synthetic colloids have been reported to increase the mortality rate and risk of renal failure in patients with sepsis.
In the patients with sepsis, balanced crystalloids may represent the first-line fluid. The synthetic colloids should be avoided because they have been shown more requirement of blood transfusion, renal replacement therapy, and higher prevalence of acute kidney injury and mortality. Albumin may improve outcomes. A reasonable threshold for red cell transfusion is Hb >7 g/dL. Initial IV bolus of 20-30 mL/kg is reasonable however, further fluid administration should be done carefully, and guided by dynamic measures of “ fluid responsiveness.
In patients with hemorrhage, the goal of resuscitation changed from early volume resuscitation to early hemorrhage control. Volume management in hemorrhagic patients should consider three principles, which are permissive hypotension, minimization of crystalloids and one to one plasma platelet to red cell transfusion, along effective damage control.
There are a variety of parameters but no gold standards to determine the volume status of patients. Volume management in ICU patients should be aimed at improving microcirculation, and so the balance between metabolism and oxygen supply. Recent trends follow a restrictive strategy as excess fluid also causes interstitial edema, which interferes with microcirculation and adversely affects patient outcomes. The choice of fluid should take into account the state of glycocalyx. The old idea of administering crystalloids more than four times of depleted plasma volume should be reexamined.

海外招請講演

[IL(E)18] 海外招請講演18

座長:丸藤 哲(医療法人 徳洲会 札幌東徳洲会病院救急センター)

Sat. Mar 2, 2019 9:40 AM - 10:30 AM 第5会場 (国立京都国際会館1F Room D)

[IL(E)18] End-of-life care, decision making and palliative care

Jozef Kesecioglu （University Medical Center Utrecht, Netherlands）

(Sat. Mar 2, 2019 9:40 AM - 10:30 AM 第5会場)

[IL(E)18] End-of-life care, decision making and palliative care

Jozef Kesecioglu （University Medical Center Utrecht, Netherlands）

【 同時通訳付き】

Jozef Kesecioglu is Professor of Intensive Care Medicine at the Department of Intensive Care Medicine, University Medical Center, Utrecht, the Netherlands. He completed his medical education and training in anesthesia and intensive care at the Medical School of University of Istanbul, Turkey, where he was later appointed as the head of the intensive care. After moving to the Netherlands in 1989, he worked in Erasmus Medical Center and Sophia Children’ s Hospital Rotterdam as anesthetist and pediatric intensivist respectively. He moved to Academic Medical Center in Amsterdam as the deputy director and has become interim director in the same department, before taking up his current position in 2002 in University Medical Center in Utrecht. He has re-organised the four intensive cares and made one department of it before designing and moving to the new, award winning, state-of-the-art ICU. He is currently the chair of the Management Team of the Division of Anesthesiology, Intensive Care and Emergency Medicine.

Professor Kesecioglu was Chairman of the Ethics Section of the European Society of Intensive Care Medicine (ESICM). After finishing his term, he worked in the Executive Committee of ESICM as the elected Chair of the Division of Scientific Affairs. He has also represented ESICM in the workgroup concerning "An official ATS/AACN/ACCP/ESICM/SCCM Policy Statement: Responding to Requests for Potentially Inappropriate Treatments in Intensive Care Units". He was elected as President of ESICM in 2016 and served as President Elect until recently. Currently, he is the President of ESICM until the end of his mandate in October 2020.

Professor Kesecioglu has authored around 130 published or in-press peer-reviewed papers and has been giving lectures in various scientific meetings. His main interests are ethics, intensive care environment and selective decontamination of the digestive tract.

Palliative sedation and palliative administration of opioids after withdrawal of treatment is common practice, normal care and an ethical requirement. The intent of the physician and not the dose of the medicine used is the determinant factor.

The use of confusing terms such as “ euthanasia” should be avoided in intensive care units. Withdrawing or withholding disproportionate life support and palliative care in intensive care patients not competent to give consent has no relation to euthanasia which is in response to a patient request to die.

Family involvement in decision making in the ICU varies greatly between countries. Variability may also exist within countries and even between intensivists within hospitals. Studies show that some family members want to share decisions with the physicians but do not want to make decisions alone. Others want to receive information without taking part in the decision at all.

Paternalism is neither equivalent to the lack of involvement of the family in decision making nor indicate bad communication. Intensive care unit caregivers should seek to develop collaborative relationships with their patients’ family members, based on an open exchange of information. Paternalism also may reflect a responsibility of the physician for decision making on medical grounds.

海外招請講演

[IL(E)19] 海外招請講演19（日本語）

座長:森﨑 浩(慶應義塾大学医学部麻酔学教室)

Sat. Mar 2, 2019 4:05 PM - 4:55 PM 第6会場 (国立京都国際会館1F スワン)

[IL(E)19] Extracellular vesicles: ARDSと敗血症の新しいターゲット

高田 正雄 （Imperial College London, UK）

(Sat. Mar 2, 2019 4:05 PM - 4:55 PM 第6会場)

[IL(E)19] Extracellular vesicles: ARDSと敗血症の新しいターゲット

高田 正雄 （Imperial College London, UK）

1980 MD, Tokyo Medical and Dental University, Tokyo, Japan
1992 PhD in Medical Science, Toho University, Tokyo, Japan
1991 Japanese Board of Pediatrics
1994 Japanese Board of Anesthesiology
1999 GMC registration (#4587758), UK
Specialist Register: Intensive Care, Paediatric Anaesthesia

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急性呼吸窮迫症候群（ ARDS）は、その疾患概念が初めて報告されてから50年以上経過した現在においても、集中治療における最大の問題の一つである。 ARDSの死亡率は、人工呼吸による肺障害を軽減する呼吸管理の進歩により改善したものの、現在でも30-40%以上と高い。 ARDSの根本的な治療法、すなわち肺内炎症の急速な進行を抑える手段、あるいは敗血症からの ARDS、逆に ARDSから多臓器不全への進展をもたらす全身と肺の間の炎症の伝播を防ぐ手段は、未だ確立されてない。過去30年の研究により ARDS治療のターゲットとして多くのメディエーターが提唱されてきたが、いずれも臨床応用に至らず、 ARDSの translational researchは現在大きな曲がり角に来ているといえる。臨床試験への堅固な土台となりうる、より再現性・信頼性の高い基礎研究を行う努力は必須であろう。しかし同時に発想を根本的に変え、質的に異なる新ターゲットを見いだす試みが、今切実に求められている。

全ての細胞から多少とも放出される細胞外小胞 (Extracellular vesicles, EV) は、かつて単なる細胞の「塵」と考えられていたが、近年になって新しい細胞間コミュニケーション媒体として、医学各領域で大きく注目されている。 EVはタンパク質・脂質・核酸などさまざまな分子を積荷としていわばフェリーのように運搬している。EVによる情報伝達の大きな特徴は、こういった積荷分子が脂質二重膜内に格納されているため、体液・血液中で通常起こる急速な拡散・中和・分解から守られていることであろう。したがって EVは、炎症シグナルを一括してかつ安定した形で長距離運搬し、遠隔標的細胞や臓器に届けることが理論的に可能である。もし ARDSにおける炎症の進行や伝播に EVが関与しているとすれば、個々のメディエーターをブロックするより、それらを運ぶ「生物学的なフェリー」である EV自体の放出や標的細胞への取り込みをコントロールすることにより、新しい次元での治療戦略を確立できる可能性がある。

本講演では、 ARDS・敗血症領域における近年の EV研究を概観し、我々の最近の研究結果、特に EVの一種であるマイクロベジクル（ microvesicles）の ARDSにおける役割に関する知見を紹介する。 ARDS・敗血症の新しいバイオマーカー、治療ターゲットとしての EVの可能性に関して考察し、合わせて次世代の集中治療医学における translational researchの意義に関して考えてみたい。