11TH UNIVERSITY OF MARYLAND EMERGENCY MEDICINE

CURRENT CONTROVERSIES IN CRITICAL CARE AND RESUSCITATION

Critical Care Symposium Information

Current Controversies in Critical Care and Resuscitation Wednesday, May 22, 2024 8:00 am – 12:00 pm EDT Virtual Event ccs.umem.org Presented by the University of Maryland School of Medicine Department of Emergency Medicine CME provided by The Center for Emergency Medicine Medical Education (CEME)

Description

The number of critically ill patients that present to emergency departments across the world continues to increase. The emergency physician (EP) is often the first physician to evaluate and resuscitate a critically ill patient. In addition to seeing more critically ill patients, EPs are frequently tasked with providing critical care long beyond the initial resuscitation. Given the continued increase in quantity of critically ill patients along with the persistence of boarding critically ill patients in the ED, it is imperative for the EP to be knowledgeable about recent trends in resuscitation and critical care medicine, so that critically ill patients continue to receive current evidence-based care. In this Critical Care Symposium, the speakers will discuss current controversies in critical care and resuscitation that are applicable to the care of critically ill emergency department patients. Select controversies include fluid resuscitation, corticosteroid use in critical illness, novel therapies for patients with septic shock, mechanical circulatory support, bicarbonate use in the critically ill.

Objectives

At the conclusion of this symposium, each participant should be able to:

- 1. Discuss a rational approach to fluid resuscitation in the critically ill patient.
- 2. Discuss the indications for REBOA and ECMO in the critically ill ED patient.
- 3. Discuss the use of novel therapies, such as methylene blue, in the patient with septic shock.



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Symposium Agenda

8:00 am Welcome & Introduction

Mike Winters, MD, MBA

8:05 am A Practical Approach to IV Fluids in Critical Care Rory Spiegel, MD

Learning objectives:

- 1. Understand the harms of over-zealous fluid resuscitation.
- 2. Identify the flaws in a fluid responsiveness strategy for fluid resuscitation.
- 3. Review and understand a Bayesian approach to fluid administration.
- 4. Discuss and understand how to apply these strategies at the bedside.

8:40 am RSI Medications in the Critically III

Kenneth Butler, DO

Learning objectives:

- 1. Understand the complexity of interpreting airway articles.
- 2. Know the facts of a paralytics choice.
- 3. Ketamine or Etomidate: What team are you?

9:15 am Break

9:25 am Back to Basics; Putting Bicarbonate Administration to the Acid Test Caleb Chan, MD, MPH

Learning objectives:

- 1. Discuss the physiologic effects of bicarbonate administration.
- 2. Discuss misconceptions surrounding bicarbonate administration.
- 3. Identify the indications for bicarbonate administration in the critically ill patient.

10:00 am Current Controversies in the Resuscitation of Septic Shock Kami Hu Windsor, MD

Learning objectives:

- 1. Provide the rationale behind and reason for controversy in the utilization of methylene blue, beta blockers, and early vasopressor initiation in septic shock.
- 2. Review the existing data on efficacy, or lack thereof, for these therapeutics.
- 3. Discuss scenarios in which these measures should/could be considered for use today.
- 10:35 am Break



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10:45 am Steroids in Critical Illness: Are They Here to Pump YOU Up? Mark Sutherland, MD

Learning objectives:

- 1. Understand indications and contraindications for prescribing steroids to patients with sepsis, ARDS, and pneumonia.
- 2. Know potential complications of steroid therapy for which to monitor.
- 3. Understand the literature base for use of steroids in critical illness and be able to differentiate areas with strong evidence versus those with weaker evidence.

11:20 am REBOA, ECPR, and Cryo...Oh My!

Kim Boswell, MD

Learning objectives:

- 1. Know current recommendations and contraindications for the use of REBOA in the Emergency Department.
- 2. Understand current literature surrounding ECPR and what population might benefit for ECPR.
- 3. Review the literature on trauma induced coagulopathy.
- 4. Understand the role of fibrinogen concentrate and cryoprecipitate in the hemorrhaging trauma patient.

11:55 am Closing Remarks

Mike Winters, MD, MBA



DEPARTMENT OF EMERGENCY MEDICINE

10TH UNIVERSITY OF MARYLAND EMERGENCY MEDICINE CRITICAL CARE SYMPOSIUM TOUGH CASES IN CRITICAL CARE

CME Statement

"This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education through the joint providership of the University of MD Emergency Medicine."

"The Center for Emergency Medical Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians."

The Center for Emergency Medical Education designates this virtual activity for a maximum of 3.75 AMA PRA Category 1 CreditsTM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

NPs, RNs, LPNs, and PAs: You may claim a certificate of participation. ANCC and AAPA accept medical *AMA PRA Category 1 Credits*[™] for nursing and physician assistant re-licensure.

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- Mike Winters, MD, MBA
- Michael Bond, MD
- Doreen Lucadamo
- Kim Boswell, MD
- Kenneth Butler, DO

- Caleb Chan, MD, MPH
- Kami Hu Windsor, MD
- Rory Spiegel, MD
- Mark Sutherland, MD