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We request our esteemed readers to send their valued feedback, suggestions & views at newsletter@isccm.org
Dear Readers,

Season’s Greetings

We are presenting you with a new issue of critical care newsletter. We saw a lot of academic activities in last two months. Branches and zones conducted excellent conferences. World Sepsis Day and ISCCM Foundation day was marked with academic activities and webinars.

The newsletter has become a platform for exchange of information on all aspects of critical care. Future scope of the newsletter is open to your suggestions. I would like to encourage you to submit original research for Criticare 2018 at Varanasi. Please encourage your colleagues to join us at Varanasi. The newsletter is going to keep you informed on upcoming events and give you inside stories on the development strategies and directions.

Please feel free to share your feedback.

Happy Reading
Dear All,

Season’s Greetings!

We are happy to share this issue of critical care newsletter.

We saw great conferences and workshops being organised by various branches. The academic content of ISCCM courses is getting richer and richer.

ISCCM Day activities were marked with great zeal and enthusiasm. Members across the nation participated in ISCCM Day.

The theme for ISCCM Day was "Organ Donation: A Gift for Life"

The webcast drew huge audience.

I will like to invite you all to the holiest of holy cities of World – Varanasi.

We are happy to share that we have decided to keep separate registration for Annual conference and workshop. We request you all kindly note and register for yourself.

Come and rejuvenate your mind and soul.

May The Divine And Spiritual Light.

Of This Holy Festival,

Brighten Up Your Life With Health And Joy.

Happy Diwali

Dr. Kapil Zirpe
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New Office Bearers of ISCCM Branches

Ludhiana

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Dr Dinesh Garg
Dr Shikha Gupta
Dr Vikas Bansal
Dr Sushil Gupta

Wishing You & Your Family Members, a Very Happy Diwali & Prosperous, Healthy Wealthy New Year

Happy Diwali
General Secretary’s Desk

Dear Friends,

Greetings from Secretary’s Desk!

We are happy to share yet another issue of critical care newsletter with our members.

These two months saw lot of academic activities across the country.

Many city branches hosted workshops and conferences in their cities.

NZCC and SZCC was academic extravaganza.

We had ISCCM Foundation day meeting organised by various city branches and centre.

ISCCM film on organ donation was highly appreciated by members and other specialties.

Members and branches participated with lot of enthusiasm.

ISCCM has bid for World congress

A lot of new examiners enrolled for IDCCM and post MBBS and fellowship exam

CRITICARE 2018 preparations are in full swing.

I on behalf of Organizing Committee, invite you all to Varanasi Criticare 2018.

Please encourage your colleagues to submit abstracts and get registered.

Happy Diwali

Delhi Critical Care Symposium
15th Annual Conference of SCCM Delhi NCR and 3rd North Zone Critical Care Conference

16th-17th September 2017 • The Leela Ambience, Gurugram

ISCCM Jalandhar Event
Introduction to sepsis was given by Dr. C Wattal. Dr Yash Javeri spoke on Sepsis emergency: Who cares?

Bacterial & Fungal sepsis was discussed by Dr. Pallab Ray

Dr B K Rao elaborated on early recognition and common mistakes in clinical management of sepsis.

Dr Senthur reviewed the therapeutic options for sepsis.

Dr. Jaswinder Kaur Oberoi elaborated on diagnosis of fungal infections and sepsis biomarkers.

The webinar was followed by question answer session.

The webinar was attended by 2400 delegates worldwide.

The webinar is available on youtube.

AIIMS Neurological Life Support Course

6-7 October 2017 at JPNATC

Organised by
Dept. of Neuroanaesthesiology & Critical Care, All India Institute of Medical Sciences (AIIMS) with ISCCM, Delhi at JPN Apex Trauma Centre, AIIMS, New Delhi

This exclusive training course was organized with the aim to help physicians, surgeons and intensivists to act prudently in critical hours while dealing with neurological emergencies. During the course, a standard protocol-based approach was taught with hands-on training. The highlights of this training course included didactic lectures and audio-visual presentations followed by hands-on skill stations.

Dr Keshav Goyal was the Organizing Secretary for the course. The course was attended by 30 delegates from across the country.
The highlights of this training course was live cases of Bronchoscopy, Hands on Training, CD of the course material and videos, Precise and accurate time management of programme schedule, CD of Atlas of Bronchoscopy, Real time Bronchoscopy Simulation etc.

Total 87 candidates were enrolled in this workshop and received completion certificate after the course.

The aim of organizing this course was to provide a rich flare of scientific material and practical approach of performing bronchoscopy and percutaneous tracheostomy in critical care settings. This training course was specially designed for specialist and post graduate trainees in critical care medicine, emergency medicine, respiratory medicine, general medicine and anaesthesia.

The foundations of scientific innovation and progress lie in curiosity, suspicion and enquiry. The art of practicing critical care medicine dwells in ability to integrate and individualize the current protocols. There is considerable overlap and conflict between these two fundamental elements.

Critically analyzing and challenging established practices can be achieved only through periodically debating and discussing these strategies. Though disciplined implementation of protocols and guidelines offer safe practice of clinical medicine, these should not become restrictive to free thinking and lateralization of clinical paradigms.

Randomized trials and clinical data have been questioned many a time to be lagging to "collective experiences" and novel therapies. Emerging evidences that challenge the current guidelines, deconstruction of current algorithms and innovative technologies will be the tools of engagement in CRITIC 2017.

This conceptual event CRITIC 2017 will enable critical care physicians in understanding such technical innovations, novel therapies and those concepts challenging existing clinical practices with defensible rationale. Modus operandi would be to stimulate thinking and perhaps throw light towards new directions with a potential for more productive research and creating environment for such conceptual modification in clinical practice.

Analytical and critical knowledge admirers of critical care medicine will lead us in understanding the controversies and fallacies in ongoing practices like a 'Manthan' of minds, at the 'Conference on Innovative Thinking in Intensive Care' - CRITIC 2017.

Workshop Registration Fee: Rs. 1,500
Conference Pre-Registration Fee:
- ISCCM members Rs. 3,000
- Non ISCCM members Rs. 3,500
Spot Registration Fee: Rs. 4,000

Payment Process:
Cheque/DD: Issued in favour of: 'SOC OF CRITICAL CARE MEDICINE' – payable at Hyderabad, Telangana.

To reach us by 5 days before the conference dates at this address:
Dr. Venkat Raman Kola, Organizing Secretary - CRITIC 2017, Room no: 217, 2nd Floor, CARE Hospital Banjara Hills, Rd. No. 1, Hyderabad, Telangana, ISCCM Office Secretary: +91 91776 55252

Online Transfer: A/c Name: 'SOC OF CRITICAL CARE MEDICINE', A/c No: 52023382758, SBH Gunfoundry Branch, Hyderabad, IFSC Code: SBHY0020066

Please email the proof/transaction id along with your name and mobile no. to: drksreddy77@yahoo.co.in

Contact for Payment Queries:
Dr. Subba Reddy (Treasurer): +91 99893 85110 e-mail: drksreddy77@yahoo.co.in
Q1. For legal purposes death is:
   a. Cessation of all brain activity
   b. Cessation of brain stem activity
   c. Cessation of cardiac activity
   d. Cardio-pulmonary arrest

Q2. Consent for retrieval of organs or tissue from the deceased is not valid if obtained from:
   a. From the deceased before death
   b. From a nominated representative of the deceased
   c. From a person in a qualifying relationship
   d. From the doctor attending the deceased at the time of death

Q3. Which of the following statements about living organ donation is incorrect?
   a. It can be directed to a specific recipient
   b. It may be commercialised in necessary circumstances
   c. It can be altruistic non-directed donation
   d. It can be altruistic non-directed donor chains

Q4. How high is the rate of survival in the first year for a kidney transplant?
   a. 69%    b. 87%    c. 94%   d. 100%

Q5. In what year was the first successful organ transplant?
   a. 1943    b. 1954    c. 1961    d. 1975

Q6. Up to how many people can one person help by donating organs?
   a. 2             b. 4            c. 5             d. 9

Q7. You are more likely to need a transplant than become a donor? True or False

Q8. Which of the following apply to a presumed consent system for posthumous organ donation:
   a. Persons must register their objections to posthumous donation.
   b. Relatives may have the right to veto organ removal in the absence of registered objections.
   c. Organ donation can proceed irrespective of relatives' views if there are no registered objections.
   d. All of the options are correct

Q9. Fill in the blanks - Legal position on Organ Donation?
Organ Transplantation and Donation is permitted by law, and covered under the "Transplantation of Human Organs Act ....", which has allowed organ donation by live & Brain-stem Dead donors. In ...., amendment of the Act also brought in donation of human tissues, thereby calling the Amended Act "Transplantation of Human Organs & Tissues Act ....".

Q10. Is the police department involved in any way for the declaration of brain-stem death?

Answers of May-June 2017 Issue
1. Cefoxitin: Cefoxitin affects routine measurement of serum creatinine, resulting in falsely elevated levels of renal function. Cefoxitin is a second generation wide spectrum cephalosporin. Other medications which can interfere includes methyl-dopa and levodopa
2. Quinolone (Ciprofloxacin/levofloxacin) - Coumadin interaction
3. All of the above
4. A. Amikacin
5. Prothrombin complex concentrates (PCC) are derived from human plasma and contain the vitamin K dependent coagulation factors II, VII, IX, and X at varying concentrations. Several international guidelines as well as American College of Chest Physicians, now recommends PCC for warfarin reversal in patients with serious bleeding.
6. Scale used to assess individuals after a closed head injury, including traumatic brain injury, based on cognitive and behavioral presentations as they emerge from coma.
7. A. Biot’s respiration
8. Etomidate has an unique characteristics for patients with traumatic brain injury, as it decreases intracranial pressure without dropping normal arterial pressure.
9. Hypertension
10. Gas Gangrene
ESC Guidelines on the Diagnosis and Management of Acute Pulmonary Embolism


Clinical Classification of Pulmonary embolism severity

- Estimated PE-related early mortality risk defined by in-hospital or 30-day mortality
- This stratification has important implications both for the diagnostic and therapeutic strategies
  - High Risk – Suspected or confirmed PE in presence of arterial hypotension
  - Not high risk – absence of shock or arterial hypotension

Diagnosis

- Clinical presentation
  - Dyspnea, chest pain, syncope, cough, shock
- Clinical probability
  - Well’s criteria and Revised Geneva criteria
- D-Dimer testing
  - D-dimer levels are elevated in plasma in the presence of acute thrombosis
  - The negative predictive value of D-dimer testing is high and a normal D-dimer level renders acute PE or DVT unlikely
- CT Pulmonary Angiogram
  - method of choice for imaging the pulmonary vasculature in suspected PE
- Ventilation-perfusion scintigraphy
  - The test is based on the intravenous injection of technetium (Tc)-99m-labelled macroaggregated albumin particles, which block a small fraction of the pulmonary capillaries and thereby enable scintigraphic assessment of lung perfusion.
  - Perfusion scans are combined with ventilation studies
  - Indications are: outpatients with low clinical probability and a normal chest X-ray, in young (particularly female) patients, in pregnancy, in patients with history of contrast medium-induced anaphylaxis and strong allergic history, in severe renal failure, and in patients with myeloma and paraproteinaemia
- Echocardiography
  - Acute PE may lead to RV pressure overload and dysfunction, which can be detected by echocardiography
  - Disturbed RV ejection pattern (so-called ‘60–60 sign’) or on depressed contractility of the RV free wall compared with the RV apex (‘McConnell sign’), tricuspid annulus plane systolic excursion (TAPSE)
  - not recommended in haemodynamically stable, normotensive patients with suspected (not high-risk) PE

Recommendation for PE with shock or hypotension

- Emergent CT angiography or bedside Transthoracic echocardiography is recommended (Grade I C)
- Patients with RV dysfunction and who are unstable to shift to CTPA should undergo CUS to look for DVT (Grade IIb C)

Recommendation for PE without Shock

- Diagnostic strategy should be based on clinical probability (Grade I A)
- Plasma D-Dimer should be done in outpatients with low or intermediate clinical probability (Grade I A)
- Normal D-dimer in low probability patients excluded PE (Grade I A)
- Normal CT angiography rules out PE in low or intermediate patients (Grade I A)
- Normal VQ scanning rules out PE (Grade I A)

Treatment of Acute Phase

- Hemodynamic and respiratory support
  - Titrated Fluid challenge
  - Norepinephrine if need for vasopressor arises
  - Hypoxemia and hypocapnia can be managed by ventilator support
- Thrombolytic therapy
  - Accelerated regimens over 2 hours are recommended
  - Agents approved are rTPA, Reteplose, Desmoteplase, Tenecteplase
- Surgical Embolectomy
  - Indications: high-risk PE, for selected patients with inter-
mediate-high-risk PE, particularly if thrombolysis is contra-indicated or has failed

Anticoagulation
• Anticoagulation is recommended, with the objective of preventing both early death and recurrent symptomatic or fatal VTE
• The standard duration of anticoagulation should cover at least 3 months
• Regimen is started by giving unfractionated heparin for 3-5 days and overlapped with VKA agents or newer oral anticoagulants

Venous filters
• Venous filters are usually placed in the infrarenal portion of the inferior vena cava
• Indicated in patients with acute PE who have absolute contraindications to anticoagulant drugs, and in patients with objectively confirmed recurrent PE despite adequate anticoagulation treatment
• Non-permanent IVC filters are classified as temporary or retrievable devices. Temporary filters must be removed within few days, while retrievable filters can be left in place for longer periods

Recommendation for PE with shock or hypotension
• Thrombolytic therapy is indicated (Grade I B)
• Intravenous anticoagulation therapy should be initiated without delay (Grade I C)
• Surgical embolectomy in patients with failed thrombolysis or contraindication to thrombolysis (Grade I C)

Recommendation for PE without shock
• Anticoagulation to be initiated without delay in low or intermediate group (Grade I C)
• LMWH or Fondaparinux is the drug of choice (Grade I A)
• Parallel treatment with oral VKA with INR target 2.5 (Grade I B)
• Alternative to VKA agent, rivaroxaban or apixaban can be initiated (Grade I B)
• Routine use of systemic thrombolytic therapy is not recommended (Grade III B)

Recommendation for Venous Filters
• Should be considered in patient with acute PE and absolute contraindications to thrombolysis (Grade IIa C)

Duration of anticoagulation – Recommendation
• For unprovoked PE, oral anticoagulation for at least 3 months (Grade I A)
• For patients with transient causes of PE, oral anticoagulation to be given for 3 months (Grade I B)

Anticoagulation treatment for indefinite period in cases with second episode of unprovoked PE (Grade I B)

For patients with PE and cancer, weight adjusted LMWH should be given for 3-6 months (Grade IIa B). Beyond 6 months, extended anticoagulation is continued indefinitely or till cancer is cured (Grade IIa C)

Diagnostic Strategies protocol

Treatment strategies for PE
Quantifying the Effects of Prior Acetylsalicylic Acid on Sepsis-Related Deaths: An Individual Patient Data Meta-Analysis Using Propensity Matching

Objective: The primary objective was to conduct a meta-analysis on published observational cohort data describing the association between acetylsalicylic acid (aspirin) use prior to the onset of sepsis and mortality in hospitalized patients.

Study Selection: Studies that reported mortality in patients on aspirin with sepsis with a comparison group of patients with sepsis not on prior aspirin therapy were included.

Data Sources: Fifteen studies described hospital-based cohorts (n = 17,065), whereas one was a large insurance-based database (n = 683,421). Individual-level patient data were incorporated from all selected studies.

Data Extraction: Propensity analyses with 1:1 propensity score matching at the study level were performed, using the most consistently available covariates judged to be associated with aspirin. Meta-analyses were performed to estimate the pooled average treatment effect of aspirin on sepsis-related mortality.

Data Synthesis: Use of aspirin was associated with a 7% (95% CI, 2-12%; p = 0.005) reduction in the risk of death compared to patients who did not receive aspirin (aspirin group mortality rate 33% vs. non-aspirin group 39%). The study characterized aspirin’s effect size as small but statistically significant.

Conclusions: These results are consistent with effects ranging from a 2% to 12% reduction in mortality risk in patients taking aspirin prior to sepsis onset. This association anticipates results of definitive studies of the use of low-dose aspirin as a strategy for reduction of deaths in patients with sepsis (Crit Care Med August 2017).

Our View: Prostaglandins are potent vasoactive fatty acids that is ubiquitously distributed throughout the body. Platelets have pathogenic roles in the multiorgan dysfunction. Indomethacin has been proven to have therapeutic effects in the sepsis models in animals. We do not disbelieve the ray of hope provided in this Meta-Analysis except for the clinical question of what is the most appropriate dose for this indication.

Heat and moisture exchangers versus heated humidifiers for mechanically ventilated adults and children

Review question: Are heat and moisture exchangers or heated humidifiers more effective in preventing complications such as airway blockages and pneumonia in adults, children or infants who receive invasive mechanical ventilation.

Background: When mechanical ventilation is used to keep critically ill people breathing effectively, the upper airway must be humidified by artificial means. Heat and moisture exchangers and heated humidifiers are the most commonly used methods of artificial humidification. Both have been associated with specific advantages and disadvantages; for example, heat and moisture exchangers are thought to be more likely to cause airway obstruction while heated humidifiers have been associated with an increased risk of pneumonia (swelling (inflammation) of the tissue in one or both lungs).

Study characteristics: We searched for studies up to May 2017. We included 34 trials in the review, with 2848 participants from 12 countries. The majority of trials (27) were set in an intensive care unit with one in a neonatal intensive care unit. The remaining seven studies were done in an operating department. Participants were infants in three studies with adults (average age of 40 to 69 years) in the remainder.

Key results: There was no overall difference in the rates of airway blockage, pneumonia or death in adults who were ventilated through heat and moisture exchangers compared to adults ventilated through a heated humidifier. There was some evidence that the occurrence of pneumonia may be lowered by using heat and moisture exchangers that capture less moisture. There was not enough information to make any conclusions about either of these methods in children or infants (Cochrane database of Systematic Reviews Sept 2017).

Our View: This topic has been debated over and over several times in the past. Nonetheless this Cochrane review is very important since it is of our concern for each patient who is on ventilator. We prefer HME for most of the routine usage, still there is a place for heated humidifiers where HME is contraindicated.

Comparison of diagnostic accuracy in sepsis between presepsin, procalcitonin, and C-reactive protein: a systematic review and meta-analysis

Background: The soluble cluster of differentiation 14 (presepsin) is a free fragment of glycoprotein expressed on monocytes and macrophages. Although many studies have been conducted recently, the diagnostic performance of presepsin for sepsis remains debated. We performed a systematic review and meta-analysis of the available literature to assess the accuracy of presepsin for the diagnosis of sepsis in adult patients and compared the performance between presepsin, C-reactive protein (CRP), and procalcitonin (PCT).

Methods: A comprehensive systemic search was conducted in PubMed, EMBASE, and Google Scholar for studies that evaluated the diagnostic accuracy of presepsin for sepsis until January 2017. The hierarchical summary receiver operating characteristic method was used to pool individual sensitivity, specificity, diagnostic odds ratio (DOR), positive likelihood ratio (PLR), negative likelihood ratio (NLR), and area under the receiver operating characteristic curve (AUC).

Results: Eighteen studies, comprising 3470 patients, met our inclusion criteria. The pooled diagnosis sensitivity and specificity of presepsin for sepsis were 0.84 (95% CI 0.80-0.87) and 0.76 (95% CI 0.67-0.82), respectively. Furthermore, the pooled DOR, PLR, NLR, and AUC were 16 (95% CI 10-25), 3.4 (95% CI 2.5-4.6), 0.22 (95% CI 0.17-0.27), and 0.88 (95% CI 0.85-0.90), respectively. Significant heterogeneity was found in both sensitivities (Cochrane Q = 137.43, p < 0.001, I^2 = 87.63%) and specificities (Cochrane Q = 180.76, p < 0.001, I^2 = 71.16%).
Conclusion: Based on the results of our meta-analysis, presepsin is a promising marker for diagnosis of sepsis as PCT or CRP, but its results should be interpreted more carefully and cautiously since too few studies were included and those studies had high heterogeneity between them. In addition, continuing re-evaluation during the course of sepsis is advisable (Ann Intensive Care. 2017 Sep 6; 7(1):91).

Our View: Sepsis being amongst the largest killers in ICUs, any strategy against it is a bonanza for the Intensivists. We do not have facilities for presepsin analysis in our labs. Presepsin has a higher sensitivity and specificity in the diagnosis of sepsis as a new biomarker, and is a predictor for the prognosis of sepsis. More importantly, presepsin seems to play a crucial role as a supplemental method in the early diagnosis of sepsis.

Statin and Its Association With Delirium in the Medical ICU*

Objectives: To examine the association between statin use and the risk of delirium in hospitalized patients with an admission to the medical ICU.


Setting: Hartford Hospital, Hartford, CT.

Patients: An initial population of patients with an admission to a medical ICU totaling 10,216 visits were screened for delirium by means of the Confusion Assessment Method. After exclusions, a population of 6,664 was used to match statin users and nonstatin users. The propensity-matched cohort resulted in a sample of 1,475 patients receiving statin matched 1:1 with control patients not using statin.

Interventions: None.

Measurements and Main Results: Delirium defined as a positive Confusion Assessment Method assessment was the primary end point. The prevalence of delirium was 22.3% in the unmatched cohort and 22.8% in the propensity-matched cohort. Statin use was associated with a significant decrease in the risk of delirium (odds ratio, 0.47; 95% CI, 0.38–0.56). Considering the type of statin used, atorvastatin (0.51; 0.41–0.64), pravastatin (0.40; 0.28–0.58), and simvastatin (0.33; 0.21–0.52) were all significantly associated with a reduced frequency of delirium.

Conclusions: The use of statins was independently associated with a reduction in the risk of delirium in hospitalized patients. When considering types of statins used, this reduction was significant in patients using atorvastatin, pravastatin, and simvastatin. Randomized trials of various statin types in hospitalized patients prone to delirium should validate their use in protection from delirium (Critical Care Medicine: Sept 2017; 45(9): 1515–1522).

Our View: We shall ask the readers whether they would like to start statin for this indications as a preventive strategy for delirium. We have never started. Yes our perception supports the findings of this study being based on a large numbers of subjects base.

Balanced versus isotonic saline resuscitation—a systematic review and meta-analysis of randomized controlled trials in operation rooms and intensive care units

Background: Fluid resuscitation is the cornerstone in treatment of shock, and intravenous fluid administration is the most frequent intervention in operation rooms and intensive care units (ICUs). The composition of fluids used for fluid resuscitation gained interest over the past decade, with recent focus on whether balanced solutions should be preferred over isotonic saline.

Methods: Systematic review and meta-analysis of randomized controlled trials (RCTs) comparing fluid resuscitation with a balanced solution versus isotonic saline in adult patients in operation room or ICUs. Primary outcome was in-hospital mortality, secondary outcomes included occurrence of acute kidney injury (AKI) and need for renal replacement therapy (RRT).

Results: The search identified 11 RCTs involving 2,703 patients; 8 trials were conducted in operation room and 3 in ICU. In-hospital mortality, as well as the occurrence of AKI and need for RRT was not different between resuscitation with balanced solutions versus isotonic saline, neither in operation room nor in ICU patients. Serum chloride levels, but not arterial pH, were significantly lower in patients resuscitated with balanced solutions.

Conclusions: Currently evidence insufficiently supports the use of balanced over isotonic saline for fluid resuscitation to improve outcome of operation room and ICU patients (Annals of Translational Medicine Aug 2017; 5(16).

Our View: Recently a sea change has taken place in favor of balanced salt solutions. While we introspect we do not find much favor towards balanced salt solutions in resuscitation practices.

Antiarrhythmics in Cardiac Arrest: A Systematic Review and Meta-Analysis

Introduction: It is widely accepted that antiarrhythmics play a role in cardiopulmonary resuscitation (CPR) universally, but the absolute benefit of antiarrhythmic use and the drug of choice in advanced life support remains controversial.

Aim: To perform a thorough, in-depth review and analysis of current literature to assess the efficacy of antiarrhythmics in advanced life support.

Material and Methods: Two authors systematically searched through multiple bibliographic databases including CINAHL, SCOPUS, PubMed, Web of Science, Medline(Ovid) and the Cochrane Clinical Trials Registry. To be included studies had to compare an antiarrhythmic to either a control group, placebo or another antiarrhythmic in adult cardiac arrests. These studies were independently screened for outcomes in cardiac arrest assessing the effect of antiarrhythmics on return of spontaneous circulation (ROSC), survival and neurological outcomes. Data was extracted independently, compared for homogeneity and level of evidence was evaluated using the Cochrane Collaboration’s tool for assessing the risk of bias. The Mantel-Haenszel (M-H) random effects model was used and heterogeneity was assessed using the I² statistic.

Results and Discussion: The search of the literature yielded 30 studies, including 39,914 patients. Eight antiarrhythmic agents were identified. Amiodarone and
lidocaine, the two most commonly used agents, showed no significant effect on any outcome either against placebo or each other. Small low quality studies showed benefits in isolated outcomes with esmolol and bretylium against placebo. The only significant benefit of one antiarrhythmic over another was demonstrated with nifekalant over lidocaine for survival to admission (p = 0.003). On sensitivity analysis of a small number of high quality level one RCTs, both amiodarone and lidocaine had a significant increase in survival to admission, with no effect on survival to discharge.

Conclusions: This systematic review and meta-analysis suggests that, based on current literature and data, there has been no conclusive evidence that any antiarrhythmic agents improve rates of ROSC, survival to admission, survival to discharge or neurological outcomes. Given the side effects of some of these agents, we recommend further research into their utility in current cardiopulmonary resuscitation guidelines (Heart Lung and Circulation. DOI: http://dx.doi.org/10.1016/j.hlc.2017.07.004).

Our View: Antiarrhythmics use is an established practice in ACLS protocols, which are widely practiced. After second cycle of CPR, if there is persistent VF or VT use of antiarrhythmics is recommended. We are unable to comment on this study because the findings need more confirmation from larger studies.

Antimicrobial resistance in the next 30 years, humankind, bugs and drugs: a visionary approach

Purpose: To describe the current standards of care and major recent advances with regard to antimicrobial resistance (AMR) and to give a prospective overview for the next 30 years in this field.

Methods: Review of medical literature and expert opinion were used in the development of this review.

Results: There is undoubtedly a large clinical and public health burden associated with AMR in ICU, but it is challenging to quantify the associated excess morbidity and mortality. In the last decade, antibiotic stewardship and infection prevention and control have been unable to prevent the rapid spread of resistant Gram-negative bacteria (GNB), in particular carbapenem-resistant Pseudomonas aeruginosa (and other non-fermenting GNB), extended-spectrum β-lactamase (ESBL)-producing and carbapenem-resistant Enterobacteriaceae (CRE). The situation appears more optimistic currently for Gram-positive, where Staphylococcus aureus, and particularly methicillin-resistant S. aureus (MRSA), remains a cardinal cause of healthcare-associated infections worldwide. Recent advancements in laboratory techniques allow for a rapid identification of the infecting pathogen and antibiotic susceptibility testing. Their impact can be particularly relevant in settings with prevalence of MDR, since they may guide fine-tuning of empirically selected regimen, facilitate de-escalation of unnecessary antimicrobials, and support infection control decisions.

Currently, antibiotics are the primary anti-infective solution for patients with known or suspected MDR bacteria in intensive care. Numerous incentives have been provided to encourage researchers to work on alternative strategies to reverse this trend and to provide a means to treat these pathogens. Although some promising antibiotics currently in phase 2 and 3 of development will soon be licensed and utilized in ICU, the continuous development of an alternative generation of compounds is extremely important. There are currently several promising avenues available to fight antibiotic resistance, such as faecal microbiota, and phage therapy (Intensive Care Medicine Oct 2017; (43)10).

Our View: Difficult bugs are the greatest challenge to the medical community at large. No patient in the community or in the hospital are free from this threat. Optimal use of the available drugs, inventions of new drugs and the alternatives to drugs, are needed to handle it.

Hemodynamic Assessment of Patients With Septic Shock Using Transpulmonary Thermodilution and Critical Care Echocardiography - A Comparative Study

Purpose: To assess the agreement between transpulmonary thermodilution (TPT) and critical care echocardiography (CCE) in ventilated patients with septic shock.

Methods: Prospective descriptive multicenter study; Patients were assessed successively using TPT and CCE in random order.

Results: A total of 137 patients were studied (71 men; age, 61 ± 15 years; Simplified Acute Physiologic Score, Sequential Organ Failure Assessment. TPT and CCE interpretations at bedside were concordant in 87/132 patients (66%) without acute cor pulmonale (ACP), resulting in a moderate agreement (kappa, 0.48; 95% CI, 0.37-0.60). Experts’ adjudications were concordant in 100/129 patients without ACP (77.5%), resulting in a good inter technique agreement (kappa, 0.66; 95% CI, 0.55-0.77). In addition to ACP (n = 8), CCE depicted a potential source of TPT inaccuracy in 8/29 patients (28%). Lactate clearance at H6 was similar irrespective of the concordance of online interpretations of TPT and CCE (55/84 [65%] vs 32/45 [71%], P = .55). ICU and day 28 mortality rates were similar between patients with concordant and discordant interpretations (29/87 [36%] vs 13/45 [29%], P = .60; and 31/87 [36%] vs 16/45 [36%], P = .99, respectively).

Conclusions: Agreement between TPT and CCE was moderate when interpreted at bedside and good when adjudicated offline by experts, but without impact on lactate clearance and mortality. http://dx.doi.org/10.1016/j.chest.2017.08.022

Our view: This observational study emphasizes the fact that interpretation of data or images is the most important aspect of any hemodynamic monitoring tool. The modality per se does not impact outcome on its own.

65 years male has had a recent neurosurgery.

Identify the device

ANSWER TO LAST IMAGE SECTION

Right upper lobe Aspergilloma

Air crescent sign
Welcome New Members to the ISCCM family

1. Prachi Verma, Jaipur LM-17/V-317
2. Saurabh Chandrashekhar, Vellore LM-17/C-442
3. Ankit Sharma, Yamuna Nagar LM-17/S-1517
4. Baljeet Kaur, Rudrapur LM-17/K-931
5. Prashant Rajebhosale, Pune LM-17/R-560
6. Umesh Jain, Mumbai LM-17/J-449
7. Ramesh N. Kondapur, Secunderabad LM-17/S-1516
8. Prashant Rajebhosale, Pune LM-17/R-560
9. Umesh Jain, Mumbai LM-17/J-449
10. Ramesh N. Kondapur, Secunderabad LM-17/S-1516
11. Prashant Rajebhosale, Pune LM-17/R-560
12. Umesh Jain, Mumbai LM-17/J-449
13. Ramesh N. Kondapur, Secunderabad LM-17/S-1516
14. Prashant Rajebhosale, Pune LM-17/R-560
15. Umesh Jain, Mumbai LM-17/J-449
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24. Umesh Jain, Mumbai LM-17/J-449
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26. Prashant Rajebhosale, Pune LM-17/R-560
27. Umesh Jain, Mumbai LM-17/J-449
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29. Prashant Rajebhosale, Pune LM-17/R-560
30. Umesh Jain, Mumbai LM-17/J-449
31. Ramesh N. Kondapur, Secunderabad LM-17/S-1516
32. Prashant Rajebhosale, Pune LM-17/R-560
33. Umesh Jain, Mumbai LM-17/J-449
34. Ramesh N. Kondapur, Secunderabad LM-17/S-1516
35. Prashant Rajebhosale, Pune LM-17/R-560
36. Aljilal Hussain, Guwahati LM-17/H-129
37. Sheetal Jayakar, Pune LM-17/J-454
38. Mohammed Ismail Nizami, Hyderabad LM-17/N-279
39. Ashwini Udupa, Udupi LM-17/U-57
40. Sandeep B. Chittoo, Mumbai LM-17/B-681
41. Rajdeep Chaudhuri, Bhandara LM-17/C-443
42. Priyanka Khurana, Ghaziabad LM-17/K-932
43. Dhruv Joshi, Bangalore LM-17/J-453
44. Anindita Saha, Kolkata LM-17/S-1520
45. Dileep Raman, Bangalore LM-17/R-561
46. Anand Agrawal, Rohitak LM-17/A-551
47. Ajay Patel, Kadi LM-17/P-863
48. Ranjith Kurup, Satara LM-17/A-33
49. Asit Ferro, New Delhi LM-17/F-33
50. Santosh Paalava, Hyderabad LM-17/P-863
51. Sagar Sanka, Hyderabad LM-17/S-1518
52. Anand Sanghi, Indore LM-17/S-1519
53. Muthukrishnan Perasamy, Erode LM-17/P-864
54. Amit Mishra, Bhopal LM-17/M-825
55. Yogita Bala, New Delhi LM-17/B-682
56. Hiya Chaturvedi, Bikaner LM-17/C-444
57. Saphthami S, Bangalore LM-17/S-1521
58. Mrigaav Meenakshi, New Delhi LM-17/B-684
59. Tuhin Mistri, Kolkata LM-17/M-826
60. Parminder Kaur, Mohali LM-17/K-935
61. Amr Varghese, Vellore LM-17/V-312
62. Amit Vadhel, Kolhapur LM-17/V-313
63. Mrunal Desai, Valsad LM-17/D-549
64. Sajidahmed Jutavala, Surat LM-17/J-456
65. Mohammed Kazim, Gulbarga LM-17/K-934
66. MD Alam, Ranchi LM-17/A-552
67. Mrinmoy Mitra, Kolkata LM-17/M-827
68. Varun Jain, Noida LM-17/J-455
69. Akshay H.M, Mysore LM-17/H-130
70. Ravi Ruhil, Gurgaon LM-17/R-562
71. Mohammed Samir, Bangalore LM-17/S-1522
72. Anil Malik, New Delhi LM-17/M-828
73. Rajiv Gupta, Varanasi LM-17/G-992
74. Sonali Kodange, Pune LM-17/K-936
75. Battula Rao, Guntur LM-17/R-563
76. Anirban Das, Kolkata LM-17/D-550
77. Nand Kishore, Dehradun LM-17/K-937
78. Arindam Bag, Kolkata LM-17/B-685
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80. Arijit Sardar, New Delhi LM-17/S-1524
81. Suvendu Lahou, Pune LM-17/L-101
82. Abdul Ahad Ryhan Uddin, Chittagong LM-17/S-1522
83. Pranab Mallick, Chittagong LM-17/M-829
84. Ujjwal Dhundhi, New Delhi LM-17/D-551
85. Suresh Sonawane, Dist Palghar LM-17/S-1525
86. Mohan Thimmappaiah, Pune LM-17/I-318
87. Prashant Dharoppugol, Gwalior LM-17/D-552
88. Chamsyiam Darak, Latur LM-17/D-553
89. Darshan Shah, Ahmedabad LM-17/S-1526
90. Charudatt Vaitty, Mumbai LM-17/V-314
91. Prabuddha Mukhopadhyay, Kolkata LM-17/M-830
92. Pinak Pandya, Mumbai LM-17/P-865
93. Samik Pramanik, Kolkata LM-17/P-877
94. Ritesh Kumar Gajjar, Nadiad LM-17/C-445
95. Kiran Naikrela, Warangal LM-17/N-285
96. Manoj Kumar, Ranchi LM-17/K-949
97. Hiren Dobariya, Rajkot LM-17/D-554
98. Chandrakant Chandrakant, Dehradun LM-17/C-445
99. Piyush Choubey, Bhopal LM-17/C-446
100. Poornam Prasad, Bhopal LM-17/P-866
101. Andee Pals, Bangalore LM-17/E-867
102. Kanswarpeet Singh, Mohali LM-17/S-1528
103. Venkata Tadivaka, Machilipatnam LM-17/T-319
104. Milankumar Patel, Pune LM-17/P-868
SWAGATHAM!

Friends,

I am honoured and privileged to assume the role of Chairperson of the 24th Annual Congress at Varanasi.

Situated on the bank of River Ganga, Varanasi is the oldest living city & considered as the holiest and most sacred place on this planet. Mark Twain once said, "Varanasi is older than history, older than tradition, older even than legend & looks twice as old as all of them put together." It is also an important industrial center, famous for its carpet, silk fabrics, perfumes, ivory works & sculptures.

Banaras Hindu University is an internationally reputed temple of learning. It was founded by the great nationalist leader, Pt. Madan Mohan Malviya, in 1916. It played a stellar role in the independence movement & has developed into one of the greatest center of learning. It has produced many a great freedom fighters, renowned scholars, artists, scientists & technologist all contributing immensely towards the progress of modern India. We also proud to be associated with six Bharat Ratna Award.

I am confident that we will be steadfast in addressing the pressing challenges. On behalf of all of us, I am most pleased to welcome Prof. D K Singh who is organizing secretary of 24 TH Annual Congress of ISCCM. Over his years of service in BHU, he has distinguished himself as a person with dedication, integrity, and professionalism. We are confident that he and his team will continue to make outstanding contributions to ISCCM.

Thus, on the behalf of Organizing Committee, Varanasi City Branch & BHU, I invite you all to join this excellent scientific feast at Varanasi in 2018. The city is eager to greet with you with spiritual music to enlighten your soul with learning & knowledge.
24TH ANNUAL CONFERENCE OF
INDIAN SOCIETY OF CRITICAL
CARE MEDICINE - VARANASI
7-11 March, 2018 • Varanasi

Venue:
Hotel Ramada, The Mall, Cantonment, Mall Rd, Varanasi, Uttar Pradesh 221002
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