Society of Critical Care Medicine - Texas Chapter

Critical Care Corner

JULY 2013, VOLUME 3, ISSUE 2

Society of Critical Care Medicine Texas

Presidents Address - Ken Hargett

We are in the middle of another exciting year for the Texas Chapter. We continue to have regular meetings in Dallas, San Antonio and Houston. The program committee is close to finalizing the agenda and speakers for our 2nd Annual Symposium which will be held Friday and Saturday November 8 & 9 at the Methodist Hospital Research Institute in Houston. The theme will be "Translating Evidence-Based Medicine into Clinical Practice". We will have topics including Updates of the Sepsis Guidelines, The New Pain, Agitation, Delirium (PAD) Guidelines, Drug Complications, Respiratory Updates and Clinical Nutrition. We will also have for those interested a concurrent hands on ECMO/VAD workshop.

The membership drive is starting and as in past years we will give a year's free membership to the Texas Chapter to individuals who sign up the most new members. Also be thinking about nominations for Board positions. We will be conducting elections this fall. We are working to revise the Chapter By-Laws and anticipate we will create official Board representatives from Dallas and San Antonio. We will also be opening submissions for the Alan Fields Awards this fall. Texas Chapter members who have abstracts accepted by SCCM can compete to receive a $1000 award towards travel to the SCCM Congress in San Francisco. Two awards will be granted. One will be given for a new researcher and one for a seasoned researcher.

Interested in becoming a Fellow of the College of Critical Care Medicine (FCCM)? Each year around 50 individuals are chosen from a large pool of applicants. The application deadline for this year has passed but it is not too late to start preparing for the next submission in April of 2014. Applicants must devote at least 50% of their time to Critical Care in Research, Clinical Practice, Administration or teaching. Your resume must demonstrate a collaborative model of practice and show significant contributions in Program Development, Scholarly Contributions and Leadership. You need two sponsors one of which must be FCCM. Weight is given to professional involvement at a local, State and national level. The Texas Chapter offers guidance in preparation/review of applications for Fellowship.

Ken Hargett, MHA, RRT, RCP, FAARC, FCCM

SCCM Texas Chapter President

EDUCATIONAL PROGRAMS

HOUSTON
JULY 17TH

DALLAS/FORT WORTH
TBA

SAN ANTONIO
JULY 31ST

*For complete program details, go to the **Chapter Events** page at*
Sccmtexaschapter.org

INSIDE THIS ISSUE:

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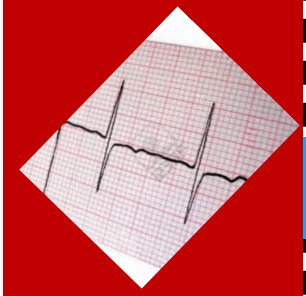
Mailing Address: TSCCM, 2429 Bissonnet Suite 461, Houston, Texas, 77005

Programs Committee Update: Brian Dee, PharmD, BCPS, BCNSP

Early spring continued to be a busy time for the Program Committee! Dr. Pablo Okhuysen, MD, presented "Nosocomial Pneumonia in the Complex Patient" in Houston on May 15th. Our Dallas membership enjoyed a presentation by Dr. Michael Ramsay, MD, on "Meeting the Joint Commission's Recommendation of Continuous Oxygenation and Ventilation Monitoring to Avoid Opioid-induced Respiratory Depression" on May 28th. Members in San Antonio had the opportunity to learn more about "Balancing Sedation, Patient Comfort, and Mechanical Ventilation in the ICU" from Dr. Laurie Grier, MD, on May 29th.

The tentative date for the upcoming chapter meeting in Houston is July 17th. Otsuka will be sponsoring a presentation on hyponatremia. The next chapter meeting in San Antonio is tentatively scheduled for July 31st and will be a presentation on anti-thrombin. The date for the next chapter meeting in Dallas is currently pending. Be sure to check out our website (www.sccmtexaschapter.org) for the latest information on all the upcoming chapter meetings in Houston, Dallas, and San Antonio! If you have any suggestions for future meetings, or would like to become involved in the Program Committee, please contact Brian Dee, PharmD, at programs@sccmtexaschapter.org.



Membership Committee Update: Rina Patel, PharmD, BCNSP

Our 2013 membership drive is currently underway! We would like to extend a warm welcome to all of our new members, and a thank you to everyone who helped to recruit their friends and co-workers to the chapter. If you or a friend/colleague is interested in becoming a member of the Texas Chapter of SCCM, please fill out an application at www.sccmtexaschapter.org/Membership. Remember, if you refer 3 individuals within the Houston area, or 2 individuals outside of the Houston area to join the SCCM Texas Chapter by December 2013, you can receive a FREE 1-year SCCM Texas Chapter membership ($45 value!). Just have the new member place your name on the application or email us at texaschapter.sccm@gmail.com

Communications Committee Update: Brandon Sterling, RN, BSN, CCRN

Greetings from the Texas Chapter SCCM Communications Committee,

Are you following us on Facebook? If not, search SCCM Texas Chapter and follow us! Our Facebook page provides information about our chapter events for all of the corresponding cities as well as interesting posts on healthcare happenings.

If you have any pictures from our chapter meetings or events please share them with us. Email us at texaschapter.sccm@gmail.com and we can upload pictures to our chapter website.

Have any great ideas for future newsletters, or would you like to highlight a unique or effective practice in your ICU? Please email us with your ideas or topics! We would love to feature them in an upcoming newsletter.

Board of Directors Member Spotlight
Mary Lou Warren, DNP, RN, CNS-CC

Mary Lou Warren, is an advanced practice nurse for the Department of Critical Care at the University of Texas MD Anderson Cancer Center. Mary Lou has over 20 years of nursing experience with a focus on pulmonary/critical care. In addition to working with a multidisciplinary team to manage critically ill patients, she has been instrumental in the development and implementation of standardized tools, such as ordersets and protocols. Most recently Mary Lou served as the team leader in the development, implementation and evaluation of mobility program for critically ill patients which has demonstrated sustainability for over two years. Mary Lou also serves as a clinical preceptor for graduate nurses and is a mentor to staff seeking graduate education.

Mary Lou obtained her Associate's Degree in Nursing from Louisiana State University at Alexandria. She then completed an RN to MSN program at the University of Texas- Houston Health Science Center. In May 2012, Mary Lou completed the Doctorate of Nursing Practice program at UT- Houston. Prior to coming to MD Anderson, Mary Lou spent 18 years at St. Luke's Episcopal Hospital in Houston where she practiced as a registered nurse, and then as an advanced practice nurse in the role of Outcomes Manager for Pulmonary/Critical Care.

Have an idea for the next newsletter? A review article or interesting practice being used in your ICU? We would love to hear from you. Email sccm.texaschapter@gmail.com with your ideas and you could contribute to an upcoming newsletter!

World Sepsis Day—Friday, September 13th, 2013

The statistics are staggering. Worldwide, someone dies from sepsis every few seconds. Sepsis causes more deaths worldwide per year than prostate cancer, breast cancer, and HIV/AIDS combined. World Sepsis Day (WSD) was first held on September 13, 2012 with more than 1300 hospitals and organizations participating around the world. The main objectives are to increase awareness among healthcare workers and the general public, to celebrate the heroes and the survivors, and to gain political support, making this disease a priority for clinical improvement. This year the goal is to have more than 2500 hospitals supporting WSD. The Texas Medical Center will be hosting WSD at the University of Texas Medical School (3rd floor auditorium) in Houston, TX. If you are interesting in volunteering to assist with WSD, please contact your local hospital, or Dr. Imrana Malik at 713-792-5040 (imalik@mdanderson.org).

FUTURE CONGRESSES

Jan 9-13, 2014
Moscone Center
San Francisco, CA

Jan 17-21, 2015
Phoenix Convention Center
Phoenix, AZ

Feb 20-24, 2016
Orange County Convention Center
Orlando, FL

Jan 21-25, 2017
Hawaii Convention Center
Honolulu, HI

Feb 24-28 2018
San Antonio Convention Center
San Antonio, TX

Feb 16-20, 2019
San Diego Convention Center
San Diego, CA

Feb 15-19, 2020
Orange County Convention Center
Orlando, FL

50th Annual

Critical Care Congress
Jan 23-27, 2021
Los Angeles Convention Center
Los Angeles, CA

GUIDELINE SUMMARY: Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium in Adult Patients in the Intensive Care Unit

GUIDELINE SUMMARY: Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium in Adult Patients in the Intensive Care Unit

Barr J, Fraser GL, Puntillo K, et al. *Critical Care Medicine*. 2013;41:263-306.

REVIEWER: Joshua T. Swan, Pharm.D., BCPS

Assistant Professor of Pharmacy Practice, Texas Southern University, Houston, TX

Clinical Pharmacist Specialist, The Methodist Hospital, Houston, TX

This article will review the 2013 Pain, Agitation, and Delirium (PAD) guidelines that were published in the January 2013 issue of *Critical Care Medicine* and serve as an update to the 2002 guidelines on sedatives and analgesics.[1,2] The guidelines are sponsored by the American College of Critical Care Medicine, Society of Critical Care Medicine (SCCM), and the American Society of Health-System Pharmacists. The 2013 PAD guidelines utilize the Grading of Recommendations Assessment, Development, and Evaluation (http://www.gradeworkinggroup.org) method to generate evidence-based recommendations, which is a more rigorous methodology than the 2002 guidelines. The 2013 PAD Guidelines are divided into three major sections (Pain and Analgesia, Agitation and Sedation, and Delirium). Throughout this review, the letter grade (A,B,C,D,E) is associated with the quality of the evidence. A number as either 1 for *strong* or 2 for *weak* is associated with the strength of the recommendation, which is accompanied by an indication (+) *for* or (-) *against* an intervention. This information is denoted inside of parentheses following each recommendation. This review does not cover all recommendations that are listed in the guidelines, and readers are encouraged to review the entire guideline document.

Successful implementation of these recommendations is a priority for SCCM, and a SCCM task force has been assembled to develop an implementation bundle to assist clinicians with integrating these recommendations into clinical practice. The guidelines also have a printable pocket card (*Figure 2. A and B on pages 292-293*), which summarizes the recommendations as well as an ICU PAD care bundle of metrics that can be used to assess current patient care and guideline implementation (*Figure 3. A and B on page 294*).[1]

One useful component of these guidelines is a psychometric analysis of bedside behavioral assessment tools that are used to diagnose and assess pain, agitation, and delirium. Assessment tools were compared based on a psychometric scoring system, and only a few were recommended for clinical use (**Table 1**).

Pain and Analgesia

Patients admitted to the ICU commonly experience pain at rest, during routine care, and during procedures (B). Pre-emptive analgesia and/or non-pharmacologic interventions are recommended before chest tube removal (+1C) and other potentially painful procedures (+2C). Intravenous opioids are recommended as the first line agents for non-neuropathic pain (+1C) and enteral gabapentin or carbamazepine are recommended, in addition to intravenous opioids, for neuropathic pain (+1A). Thoracic epidural analgesia is recommended in patients undergoing abdominal aortic aneurysm surgery (+1B) and in patients with traumatic rib fractures (+2B).

Agitation and Sedation

Maintaining light sedation, rather than deep sedation, is associated with a shorter ICU length-of-stay and duration of mechanical ventilation (B). Therefore, sedative medications should be titrated to maintain light sedation in adult ICU patients, unless clinically contraindicated (+1B). Clinical contraindications to light sedation may include, but are not limited to, concurrent use of neuromuscular blocking agents, ongoing seizures for which sedatives are indicated, and increased intracranial pressure. For mechanically ventilated patients, non-benzodiazepine sedation regimens (either propofol or dexmedetomidine) are preferred over benzodiazepines (either midazolam or lorazepam) (+2B). Benzodiazepines may still be the preferred agent for mechanically ventilated patients who are actively withdrawing from alcohol or benzodiazepines.

GUIDELINE SUMMARY: Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium in Adult Patients in the Intensive Care Unit (cont'd)

Delirium

Delirium is associated with increased mortality (A), prolonged ICU and hospital length-of-stay (A), and post-ICU cognitive impairment (B). Routine monitoring of delirium in the ICU is feasible and is recommended (+1B). Known risk factors for developing delirium include preexisting dementia (B), history of hypertension (B), history of alcoholism (B), a high severity of illness on admission (B), recent coma (B), and benzodiazepine use (B); however, the risk of propofol use is unknown (C). Early mobilization of patients reduces the incidence and duration of delirium (+1B). A substantial change in recommendations from the 2002 guidelines, is that haloperidol is no longer recommended for the treatment of delirium as there is no evidence to support this practice (no evidence). In the 2002 guideline, haloperidol was recommended based on data from a case series, but this information was not rigorous enough to meet the evidence standard for the 2013 PAD guidelines. Since no prospective trial data is available to support safety or efficacy of haloperidol, there is no recommendation for or against haloperidol for the treatment of delirium (no evidence). Atypical antipsychotics may reduce the duration of delirium (C), but this practice has only been studied in small clinical trials. Neither haloperidol nor atypical antipsychotics are recommended for the prevention of delirium (-2C); these agents can cause QTc interval prolongation and should not be used in patients at risk for torsades de pointes (-2C). For mechanically ventilated patients who develop delirium, clinicians should consider changing benzodiazepine-based sedation to dexmedetomidine to lower the prevalence of delirium (B). However, patients who are undergoing alcohol or benzodiazepine withdrawal may require benzodiazepine-based sedation. Rivastigmine is not recommended for the treatment of delirium and is associated with unfavorable patient outcomes (-1B).

Strategies for Managing Pain, Agitation, and Delirium

For mechanically ventilated patients, daily sedation interruption (+1B), a light target of sedation (+1B), and an analgesia-first sedation strategy (administer analgesics for pain prior to sedatives for sedation) (+2B) are recommended. Promotion of sleep is a priority for ICU patients, and environmental factors of light, noise, and physical stimuli should be coordinated to optimize sleep (+1C). The guidelines recommend that the multidisciplinary ICU team should utilize education, protocols, and ICU rounds checklists to facilitate management of pain, analgesia, and delirium (+1B).

Table 1. Behavioral Assessment Tools Supported by the 2013 PAD Guidelines

	Pain	Agitation	Delirium
Recommended for clinical use	Behavioral Pain Scale (BPS) (B) Critical-Care Pain Observation Tool (CPOT) (B)	Richmond Agitation-Sedation Scale (RASS)(B) Sedation-Agitation Scale (SAS)(B) Objective measures of brain function[A] as an adjunct for patients who are receiving neuromuscular blockers (+2B) EEG monitoring in known or suspected seizures (+1A)	Confusion Assessment Method for the ICU (CAM-ICU)(A) Intensive Care Delirium Screening Checklist (ICDSC)(A)
Not recommended for clinical use	Do not use vital signs (-2C)	Do not use objective measures of brain function[A] as the primary assessment in non-paralyzed patients (-1B)	

A – Objective measures of brain function include auditory evoked potentials (AEPs), Bispectral Index (BIS), Narcotrend Index (NI), Patient State Index (PSI), and state entropy (SE), electroencephalogram (EEG)

References:

1 - Barr J, Fraser GL, Puntillo K, et al. Clinical practice guidelines for the management of pain, agitation, and delirium in adult patients in the intensive care unit. *Critical Care Medicine*. 2013;41:263-306

2 - Jacobi J, Fraser GL, Coursin DB, et al. Clinical practice guidelines for the sustained use of sedatives and analgesics in the critically ill adult. *Critical Care Medicine*. 2002;30:119-141

2013 SCCM Texas Chapter Symposium - Updates

The annual symposium planning committee is hard at work preparing an excellent symposium for the 2013 year. Last years symposium was such a success that the event has been increased to a two day symposium. The title of the symposium is "Translating Evidence Based Medicine into Clinical Practice". With numerous recent updates to key guidelines being released such as the Surviving Sepsis Guidelines, Pain, Agitation and Delirium Guidelines, and Hyperglycemia Guidelines, chapter leadership though it would be very practical to create our symposium this year around applying these guidelines into our clinical practice. Speakers from our own Texas Chapter and nationally recognized speakers will be in attendance providing information to make these guidelines a reality in your practice

Society of Critical Care Medicine Texas Chapter

When: Friday November 8th, and Saturday November 9th, 2013 (7:30AM-4:00PM)

Where: The Methodist Hospital Research Institute (TMHRI)

Target Audience: Physicians, Nurses, Pharmacists, Mid-level Practitioners, Dieticians, Respiratory and Physical Therapists, and any other ICU clinicians

The educational program for the symposium includes a keynote address, six education sessions with three presentations in each session and a Q&A session with the speakers, exhibit hall, poster session, catered lunch, coffee and snacks and a closing address. The program for the event is currently being finalized, but tentative sessions include:

- ICU Liberation (Analgesia, sedation & delirium, Mechanical ventilation, Early mobility)
- Sepsis (Early clinical detection, Sepsis intervention teams, 2013 Guidelines update)
- Cardiopulmonary Support (LVAD, From ARDS to ECMO, Mechanical Ventilation)
- Nutrition and glycemic control (Enteral nutrition, Indirect calorimetry, Hyperglycemia guidelines update)
- Supportive care (Renal replacement therapy, Nosocomial infections, End of life considerations)

Information regarding registration, parking, hotel accommodations and continuing education will be coming in the next few months.

All information will also be posted on our chapter website at:

http://www.sccmtexaschapter.org/Annual_Symposium.html.

Please be sure to check this webpage periodically for updates and information regarding the symposium.