



## The History of Military Emergency Medicine

By Col Lee Payne, USAF, MC



Perhaps it's my age, and the fact that I have to write everything down these days in order to preserve any possibility of remembering anything, but I have become very interested in history lately. In particular, my interest has been focused on the history of emergency medicine and the beginnings of military emergency medicine. All this reflection has given me ideas for our chapter which I would like to share with you, and enlist your support. But I am getting ahead of myself; let me go back a bit to how this all got started.

One of my goals as president this year was to re-establish our visits to all our residency programs to highlight ACEP, Government Services Chapter, and encourage resident and academic faculty membership and involvement in our organization. Texas ACEP was scheduled to visit the joint residency in San Antonio and graciously invited me to join them. I was asked to prepare a talk on the history of emergency medicine, and military emergency medicine. While doing the research for the presentation, I discovered this year was the 50th Anniversary of the beginnings of emergency medicine in Alexandria, Virginia. ACEP has done us a great favor by posting three videos on the Alexandrian Plan which gives a great historical perspective on the start of emergency medicine at Alexandria Hospital by Dr. James Mills and three other colleagues. In the videos, there are introductions by the CEO of Alexandria Hospital, including a very good presentation by Dr. Brian Zink, on why the Alexandria Plan got started and the environmental conditions present in medicine in 1961 that led to the development of the specialty. Dr. Zink is the chairman of Emergency Medicine at Brown University and the author of *Anyone, Anything, Anytime: A History of Emergency Medicine*. Published in late 2005, this is the only well-documented history of our specialty. It is unfortunately out of print, but I contacted Dr. Zink who told me he is trying to get it reprinted by another publisher.

The next step on my journey led me to some of our founding fathers in military emergency medicine. I spoke with Dr. Barry Wolcott, the founder of Army Emergency Medicine, the residency at Brooke Army Medical Center, and the specialty's first Consultant to the Surgeons General. I also spoke with Dr. Ray TenEyck, one of the early Air Force Consultants to the Surgeons General, and a fount of knowledge about Air Force Emergency Medicine. Ray served as our consultant for a total of 14 years! Dr. Cloyd Gatrell, a former department chair at Madigan, and a GSACEP past-president, was also helpful with a treasure trove of memories about our beginnings. My journey was lacking in the story of the birth of emergency medicine in the Navy which is one aspect I would like to correct as I refine the presentation for the future. I gave the presentation at the joint session with TCEP and it was well received by the residents—or at least they were politely attentive! I hope to give the next iteration of the presentation at another joint visit with TCEP to Darnell Army Emergency Medicine program on December 1st. The story is a very interesting one!

Dr. Wolcott suggested that it was important to try and capture as much of this history as possible while those that created it were still alive. He put me in contact with Dr. Dale Smith of the Uniformed Services University of Health Sciences (USUHS) to propose a project to use trained historians to obtain structured interviews of the many people involved with the development of military emergency medicine since its beginnings in the mid-seventies to the present. This will not be an inexpensive undertaking and I would like to propose that GSACEP take the lead in obtaining funding to complete this project. We will need others to contribute, but who better to sponsor this effort than our chapter!

I have been involved in military emergency medicine since I came on active duty in 1987 and I was very proud, if somewhat surprised, to learn about the whys and wherefores of the origins of our specialty in Virginia and at Brooke Army Medical Center. It is a great history that has done much for medicine, and even more for the patients we serve. I look forward to helping document that history more completely in the future.

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## TIDBITS FROM THE EDITOR

By MAJ Rachel Villacorta Lyew, MC, USA

Please check out the newly re-designed GSACEP website at [www.gsacep.org](http://www.gsacep.org). The layout of the resources has been improved, but any feedback you have is welcome. There is a section called "In The Field" for those who may be deploying or those who want to share their experiences. There will also be a link for the Member Services Survey. The idea is that our members indicate what professional needs the chapter can enhance or add to better serve members. GSACEP is also making a greater effort to recognize our members with various awards. Also, In this edition of EPIC we are going to have a "Clinical Corner" to showcase the clinical highlights of a medical case seen by a GSACEP member. Please also check out the information about the awards available to our members and the nomination process.

Medicine has always been a profession of service to our patients and it has never been more true in the military and GSACEP. It is truly exciting time to be part of the military and Government Services as we transition to a model of joint service medical treatment facilities. The National Capital Area now has two joint MTF's in Walter Reed National Naval Medical Center in Bethesda, MD, and the brand new Fort Belvoir Community Hospital built in the concept evidence-based health care. While there will always be rivalries amongst the sister services, the patients will benefit greatly in the collaboration of knowledge and experience the different branches of the military are able to provide. There will be "growing pains," but ample opportunity to impact the future of military emergency medicine.

This edition of EPIC is publishing very close to the ACEP Scientific Assembly in San Francisco. I hope to see many of you there to exchange thoughts and ideas on the future of GSACEP!

### GSACEP EVENTS AT SCIENTIFIC ASSEMBLY

#### GSACEP Strategic Planning Meeting

Wednesday, 10/12/2011

0800-1700

MTG Room: Union Square 25, 4th floor, Tower 3, Hilton Hotel San Francisco Union Square

*For GSACEP Board Members and Committees*

#### GSACEP Board of Directors Meeting

Sunday, 10/16/2011

0800-1030

MTG Room: Green Room, Grand Ballroom Level, Hilton Hotel San Francisco Union Square

*Open to all GSACEP Members*

#### GSACEP Reception

Sunday, 10/16/2011

1800-1930

MTG Room: Golden Gate 6, Lobby Level, Hilton Hotel San Francisco Union Square

*Open to all GSACEP Members and reception Sponsors*

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*The opinions and assertions in this issue are solely those of the authors, or GSACEP, and are not necessarily those of the Department of Defense or any other US government agency.*

## GSACEP ENDORSES MARCO COPPOLA, DO, FACEP, FOR ACEP COUNCIL SPEAKER



For almost 22 years, The Government Services Chapter has been fortunate enough to have COL Marco Coppola, DO, FACEP, as a member. Now, it is our great privilege to endorse him for Speaker of the ACEP Council.

If you serve as a Councillor, you know that, for the past two years, Dr. Coppola has been Council Vice Speaker. You have observed him at the Council Meetings, and have seen that he acts with ease as a mediator between physicians of dissimilar opinions. That is because Dr. Coppola's own diverse background has enabled him to genuinely identify with and respect fellow physicians of diverse backgrounds and opinions. Having experienced the gamut of emergency medicine, from military to civilian, academic to community practice, contract management group employee to owner and partner of a democratic group, Marco brings a thorough perspective to the Council. In addition, he has served on a number of ACEP Council Committees, including Teller's, Credentials and Elections, and the Council Steering Committee. This background, coupled with his wit and good nature, has made Marco Coppola an excellent Vice Speaker, and will make him an excellent ACEP Council Speaker.

The GSACEP chapter certainly knows what an asset COL Coppola is. He is our only Board Member to have served twice as President of the chapter, giving us six years of leadership as he went from President Elect to President to Immediate Past President. Marco served as a GSACEP Councillor for 15 years.

He chaired the GSACEP Membership Committee during the years of the chapter's greatest growth. He developed, with COL David Della-Giustina, MD, FACEP, our own Oral Board Review Course, and chaired it for many years. In 2007, in recognition of all he had done for us, and military medicine, Dr. Coppola received our chapter's highest honor, the Excellence in Military Emergency Medicine Award.

At that point, he had also served his country in Iraq. As a Colonel in the Texas Army National Guard, Dr. Coppola served as Commander of the Texas Medical Command.

To list Marco's accomplishments as a published author would take up several pages, and can't be accomplished in this article. He remains a full professor in emergency medicine, and is as comfortable in an academic setting as he is caring for a patient.

To this day, Dr. Coppola is involved in our chapter, though more as a mentor now than as a daily participant. For those of us who have known him from his days at Darnall Army Medical Center, or even earlier, as a resident, he remains a consistent leader with a strong vision of emergency medicine's future.

Most importantly, to many of us, he remains a true and close friend.





# GSACEP AWARD ANNOUNCEMENTS

The GSACEP Board of Directors is in awe of the remarkable accomplishments of our members, despite the additional challenges of government service and deployments we endure. One way we recognize our colleagues is through the annual GSACEP Awards Program managed by the Awards Committee. The challenge of the awards committee has not been identifying deserving candidates, but publicizing the existence of our various awards. Below is a description of the various awards GSACEP offers each year and the timelines for selection. Please nominate the noteworthy activities of your fellow colleagues. Who knows? You may be the next winner!!

## GSACEP USU SENIOR STUDENT AWARD

**CRITERIA FOR NOMINATION:** The GSACEP USU Senior Student Award is intended to honor the senior medical student who best demonstrates the qualities and attitude of an exemplary military Emergency Physician. This is the resident you want working for you on the floor, the staff you can trust to bounce ideas off of, the doc commanders will go to in order to get things done, and one the patients and staff will look to for their knowledge, compassion and bedside manner. These candidates are future chief resident material. This award is given annually. Winners receive a certificate and free one year memberships to GSACEP, ACEP and EMRA.

**NOMINEES MUST MEET THE FOLLOWING CRITERIA:**

- USUHS fourth year medical student in good standing.
- Outstanding work and professional activities

**SELECTION AND PRESENTATION** The USU Senior Student Award winner is selected by the USU Military and Emergency Medicine staff near the end of each academic year and the award is presented at graduation ceremonies.

## GSACEP RESIDENT LEADERSHIP AND ADVOCACY SCHOLARSHIP

**CRITERIA FOR NOMINATION** The GSACEP Resident Leadership and Advocacy Scholarship is intended to honor the Emergency Medicine residents showing outstanding dedication to the specialty. Based on prior performance and accomplishments, these residents are anticipated to become the future leaders in emergency medicine.

**NOMINEES MUST MEET THE FOLLOWING CRITERIA:**

- Active resident in an accredited Emergency Medicine residency program.
- Active member of GSACEP
- Outstanding work and professional activities.

Any member of the Government Services Chapter of the American College of Emergency Physicians (GSACEP) may nominate himself/herself or another resident member for this award.

**ANNUAL CALL FOR NOMINEES: DEC; DEADLINE FOR NOMINATIONS: FEB**

**SELECTION AND PRESENTATION** The Resident Leadership and Advocacy award winner is selected by a majority vote of awards committee members and the GSACEP resident representative, the chair vote deciding in a tie situation. Awardees' are announced in the May timeframe and receive a scholarship funding attendance at the ACEP Leadership and Advocacy Conference in Washington, D.C where they will be able to meet with legislators from the state in which they currently reside, meet with GSACEP and ACEP leadership, and network with fellow residents and attending physicians.

## GSACEP RISING STAR AWARD

**CRITERIA FOR NOMINATION** The GSACEP Rising Star Award is intended to honor the junior Emergency Medicine staff that most exemplifies excellence and dedication to service. Similar in intent to sports-based "rising star" awards, the GSACEP Rising Star Award is given annually to a standout young EM physician who displays exceptional service to the Government Services Section and/or outstanding leadership in the profession.

**NOMINEES MUST MEET THE FOLLOWING CRITERIA:**

- Between one and five years out of Emergency Medicine Residency Training
- Active member of GSACEP
- Outstanding work and professional activities.
- Notable service to professional Emergency Medicine organizations (preferably GSACEP).

Any member of the Government Services Chapter of the American College of Emergency Physicians (GSACEP) may nominate himself/

herself or another member for this award using the GSACEP Rising Star Award Nomination Form. The leadership team of any hospital, military treatment facility, or military unit may also nominate someone for this award. **ANNUAL CALL FOR NOMINEES: NOV - DEC; DEADLINE FOR NOMINATIONS: FEB** **SELECTION AND PRESENTATION** The Rising Star award winner is selected by a majority vote of awards committee members, the chair vote deciding in a tie situation. The award is presented at the annual GSACEP Joint Service Symposium.

## GSACEP MEDICAL DIRECTOR LEADERSHIP AWARD

**CRITERIA FOR NOMINATION** Any member of the Government Services Chapter of the American College of Emergency Physicians (GSACEP) may nominate himself/herself or another member for this award. The leadership team of any hospital or military treatment facility may nominate a GSACEP member for this award. The nominee must be a GSACEP member and must currently be in a leadership position in an emergency department. The nominee must demonstrate significant contributions to the department in the following categories:

- Quality Patient Care
- Operational Effectiveness
- Education
- Community Service
- Collaboration with Nursing
- Synergistic approach to leadership within the hospital or hospital system

The nominee must demonstrate collaborative relationships with nursing and ancillary departments to implement and improve operational and clinical standards based on evidence-based practice. The nominee will create and sustain a high degree of patient satisfaction with emergency care delivery and will implement creative and innovative strategies to address emergency department throughput.

**ANNUAL CALL FOR NOMINEES: NOV-DEC; DEADLINE FOR NOMINATIONS: FEB** **SELECTION AND PRESENTATION** The Medical Director Leadership award winner is selected by a majority vote of awards committee members, the chair vote deciding in a tie situation. The award is presented at the annual GSACEP Joint Service Symposium.

## GSACEP EXCELLENCE IN EMERGENCY MEDICINE AWARD

**CRITERIA FOR NOMINATION** Any member of the Government Services Chapter of the American College of Emergency Physicians (GSACEP) may nominate himself/herself or another member for this award. The leadership team of any hospital or military treatment facility may nominate a GSACEP member for this award. This award recognizes a leader with a record of significant contributions to military emergency medicine, resulting in noteworthy impact on the profession. The nominee must be a GSACEP member

**NOMINEES MUST MEET THE FOLLOWING CRITERIA:**

- Active member of GSACEP
- Outstanding work and professional activities.
- A proven record of noteworthy, sustained, contributions to military emergency medicine.

**ANNUAL CALL FOR NOMINEES: NOV - DEC; DEADLINE FOR NOMINATIONS: FEB** **SELECTION AND PRESENTATION** The Excellence in Military Emergency Medicine award winner is selected by a majority vote of awards committee members, the chair vote deciding in a tie situation. The award is presented at the annual GSACEP Joint Service Symposium.

## SCHOLARSHIP WINNER REFLECTS ON THE ACEP LEADERSHIP CONFERENCE

By LCDR Ellie Ventura, MC, USN

Having done health policy research in the past, I have glimpsed work behind the scenes while physicians in the field continue to see patients in hospitals and outpatient clinics. However, thanks to GSACEP, the ACEP Leadership & Advocacy Conference in Washington, D.C. gave me, and my fellow residents, LCDR Gutierrez, and CPT Josh Simmons, the chance to see health policy happen at the national level.

Often times, emergency physicians serve as the sole advocates of the medically under-served. As military physicians, we may feel somewhat isolated from what civilian EDs experience daily. However, since the military faces threats of significant cutbacks in healthcare spending, we may have to overcome, as our civilian counterparts have, similar obstacles in providing services that may not be reimbursed, as well as finding ways for patients to obtain necessary but expensive medications.

At this conference, one of the main principles I learned is that there is no easy answer. It will take many different advocacy organizations and government entities to come to an agreement to provide quality healthcare to the largest number of people possible. Now that the healthcare reform bill has passed, several issues are at the forefront. ACEP is advocating getting rid of the sustainable growth rate formula where Medicare reimbursement is restricted to a certain percentage of Gross Domestic Product. Repealing the Independent Advisory Board is also a high priority for ACEP right now. The IPAB is not a friendly computer

device; it is a panel of 15 people (most likely non-physicians) which was created to curtail government healthcare spending. This group may lead to further rationing of care and decreased reimbursement for emergency care. Finally, ACEP has recently launched the “Just 2%” campaign because there is a large public misperception that emergency department visits are responsible for skyrocketing healthcare costs. In reality, they account for a very small portion of every dollar spent. We need to continue to train more emergency physicians, advocate for tort reform, and find a way to accommodate all of the newly insured under the healthcare reform law.

For me personally, there were two very memorable experiences at this conference. The first was dinner one evening with the rest of the GSACEP attendees. We had very good French cuisine at small restaurant in Woodley Park. It was great to get to know people from other services and other residency programs. The second was going to Capitol Hill. I didn't realize that all that stands between me and my Congressman/woman is a metal detector. Our representatives are much more accessible than any of us realize.

Overall, the conference was a great event. I recommend that military residents apply for the GSACE scholarship in 2012, and that, for the sake of their long-term careers in medicine, they seek to be aware of our issues, and involved while in the military.

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## Update from SAUSHEC

By MAJ Jason Heiner, MC, USA, and LtCol Robert Thaxton, USAF, MC

*This is the first in a series of articles from our residency programs. In coming months, we hope to hear from all of them, and to continue to receive updates from each.*



LtCol Thaxton

These are exciting times for the San Antonio Uniformed Services Health Education Consortium (SAUSHEC) emergency medicine (EM) residency program! Our complement of over 30 emergency physicians are now under one roof with the recent move of the Wilford Hall Medical Center emergency services to Brooke Army Medical Center (soon to be renamed the San Antonio Military Medical Center and featuring a remodeled 60+ bed emergency department). Many of our emergency physicians have completed fellowships in critical care, emergency medical services (EMS), medical toxicology, or ultrasound. With our new ultrasound and EMS fellowships up and running, as well as our affiliated emergency physicians at the US Army Institute of Surgical Research and the AMEDD Center and School, Fort Sam Houston is becoming a unique opportunity for the scholarly minded to contribute and investigate many aspects of EM.

Our current SAUSHEC and nearby EM physicians at Fort Sam Houston are making an impact in the world of academic and military emergency medicine. Over the past three years they have produced more than a 15 book chapters (including standard references such as Rosen's Emergency Medicine: Concepts and Clinical Practice, Tintinalli's Emergency Medicine: A Comprehensive Study Guide, and Roberts & Hedges Clinical Procedures in Emergency Medicine) and more than 120 published manuscripts (featured in journals such as Annals of Emergency Medicine, Academic Emergency Medicine, the New England Journal of Medicine, Lancet, and the Journal of Trauma). With many fellowship trained physicians, the department also receives federal research funding. These busy physicians are truly advancing the practice of military medicine and combat care by mentoring tomorrow's EM physicians, changing the practice of EM through research, and deploying overseas to care for our service members during this Global War on Terror.



## CLINICAL CORNER

### “I FEEL WEAK, DOC”

By CPT Joshua Simmons, MC, USA

A 76 year old female presented to the Emergency Department (ED) with a two-day history of generalized weakness and pre-syncope episodes. Her past medical history was significant for Diabetes Mellitus (DM), hypertension (HTN), hyperlipidemia, iron deficiency anemia, chronic renal insufficiency and peripheral neuropathy. Her reported outpatient medications include: telmisartan 40mg daily, insulin glargine 10 units at bedtime, metformin 500mg twice daily, felodipine extended release (ER) 10mg daily, hydrochlorothiazide 12.5 mg daily, diltiazem ER 120mg daily, pravastatin 40 mg at bedtime, aspirin 81 mg daily and vitamin D 50000 units every week. Review of systems was remarkable for a one day history of chills, but was negative for chest pain, shortness of breath, cough, fevers, nausea/vomiting, diarrhea, head injury, loss of consciousness, hematochezia, melena or abdominal pain. Her initial vitals on presentation were blood pressure of 74/47 mm Hg, heart rate of 88 beats per minute (BPM), respirations of 18 breaths per minute, oxygen saturation of 96% on room air and a rectal temperature of 99.6 degrees Fahrenheit. Her physical exam was largely unremarkable except for a slight systolic murmur on cardiac exam and negative guaiac stool. Her initial laboratory evaluation was remarkable for a white blood count (WBC) of  $12.3 \times 10^9/L$ , hemoglobin of 8.1 g/dL, glucose of 216 mg/dL, BUN of 51 mg/dL, creatinine of 2.19 mg/dL, sodium of 131 mmol/L, lactate of 2.5 mmol/L, BNP of 225 pg/mL. Other laboratory tests including serum ketones, troponin, thyroid panel, liver function tests and urinalysis were within normal limits. Her anemia, elevated creatinine and hyponatremia were all chronic findings and consistent with previous labs in our system. Her electrocardiogram (ECG) showed diffuse ST elevation in II, III, aVF, V3-V6 without reciprocal changes. Cardiology was consulted and they felt that the ECG was most consistent with pericarditis. A bedside echocardiogram showed a small effusion without any evidence of tamponade physiology. Chest x-ray (CXR) showed hazy opacities in the left costophrenic angle and in the retrocardiac area that were likely atelectasis versus developing pneumonia. She was given IV fluids with improvement in her blood pressure, started on empiric antibiotics for possible pneumonia with ceftriaxone and azithromycin and admitted to cardiology for possible pericarditis.

Overnight, the patient worsened significantly. She became persistently hypotensive associated with worsening bradycardia. The patient continued to receive large volume crystalloid resuscitation and she was transferred to the intensive care unit (ICU). During preparation for central line placement, the patient became unresponsive and briefly required chest compressions (1 minute) due to lack of palpable pulses. She was emergently intubated without complication. Her blood pressure was in the 50s-60s systolic with a heart rate in the 30s. Atropine and epinephrine were given with minimal improvement. Repeat ECG showed sinus bradycardia without evidence of heart block. Serial troponins were negative. Dopamine and norepinephrine pressor support was initiated with improvement in both heart rate and blood pressure. A repeat bedside echocardiogram was unchanged making tamponade unlikely. Her lactate worsened to 4 mmol/L and her WBC increased to  $19 \times 10^9/L$ . She continued to remain afebrile without an obvious source for sepsis. She was transfused red blood cells for her low hemoglobin, however, she did not have any evidence of ongoing bleeding. A Swan-Ganz (PA) catheter was placed to further determine the etiology of shock. She was found to have a central venous pressure of 14, cardiac output of 4.2-5.5 L/min, systemic vascular resistance of 1010 dynes/sec/cm<sup>5</sup> and a SvO<sub>2</sub> of 50s-80s, which all suggest a non-distributive shock not consistent with sepsis. Over the course of the next day, the patient rapidly improved, was weaned off of pressors and extubated. She quickly returned to her baseline with blood pressures in the 160s systolic. Her blood and urine cultures were negative. She was transferred out of the ICU and had an uneventful further hospital course.

The differential diagnoses for hypotension and bradycardia include: sepsis, acute myocardial infarction, calcium channel blocker overdose, beta blocker overdose, cardiac tamponade, myocarditis, conduction block. The etiology of the patient's shock was suspected to be related to her medications.

This patient was suspected to have a calcium channel blocker (CCB) overdose. On review of her medications and after discussion with her husband, the patient was taking two calcium channel blockers (diltiazem and felodipine) for unclear reasons, both of which were extended release preparations. It was unclear if she was taking them as directed. There are two classes of calcium channel blockers, the dihydropyridines and the nonhydrodipyrindines. Diltiazem is a nonhydrodipyrindine CCB, which exerts its effects primarily on the L-type calcium channels in the myocardium. This class exerts a weak vasodilatory effect but a more profound depressive effect on cardiac conduction and contractility. Toxic levels of this class typically cause vasodilation, decreased inotropy and bradycardia. Felodipine is a hydrodipyrindine which primarily blocks the L-type calcium channels in the vasculature. This class exerts a strong vasodilatory effect with little effect on the heart. Toxic levels of this class typically cause hypotension with reflex tachycardia because the conduction is not blocked. This patient had symptoms more consistent with nonhydrodipyrindine toxicity. Another helpful finding is hyperglycemia, which can help distinguish this condition from beta blocker toxicity, which usually has hypoglycemia.

*Continued on Page 7*



Initial treatment should begin with IV fluids for hypotension. If needed, atropine or other vasopressors can be given for symptomatic bradycardia, although it may not work. In patients who present early after an ingestion or have taken extended release preparations, activated charcoal, gastric lavage and whole bowel irrigation may be considered, especially if lethal ingestion is suspected. There are several specific therapies for CCB overdose. As the mechanism of action for this toxicity is blockade of L-type calcium channels, IV calcium can be given to try and overcome this block, however, this often does not result in clinical improvement. Calcium gluconate or calcium chloride can be given and if there is an improvement in vital signs, additional doses can be given. Glucagon increases intracellular cyclic AMP, which can potentially increase cardiac contractility and heart rate. This can be given intravenously, however, patients should be pre-treated with an antiemetic, as this can cause vomiting.

Newer and likely more effective therapies include high dose insulin therapy and intralipid emulsion therapy. High dose insulin therapy is typically one unit per kilogram as a bolus, followed by 0.5 units per kilogram per hour with titration as needed until hypotension resolves. Glucose and potassium must be closely monitored. In CCB toxicity, patients will typically be hyperglycemic and may not require dextrose supplementation. Finally, lipid emulsion therapy (LET) should be considered. Data is limited, but there are case reports of significant improvement with this therapy. The lipid emulsion, which is basically the lipid portion of TPN, acts to bind up the circulating drug, which can then be excreted. It also provides a source of energy for the cardiac muscle. The recommended dosage is 1-1.5 ml/kg of a 20% solution as a bolus and then an infusion of 0.25-0.5ml/kg can be started. These patients should be admitted to the ICU for close monitoring, as they have a tendency to decompensate quickly, like this patient.

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## **ATTENTION DEPLOYED MEMBERS**

Remember that if you are deployed to a combat zone The Government Services Chapter of ACEP (GSACEP) and the Young Physicians Section have partnered with ACEP to provide free CME for service members who are unable to attend continuing medical education events.

To do this, we will send you a free 1-year online subscription to ACEP's Critical Decisions in Emergency Medicine. Each monthly issue of Critical Decisions contains two clinical lessons, summaries of articles from ABEM's Lifelong Learning and Self-Assessment reading list, reviews of ECGs, images, and drugs, and can provide 5 CME credits (60 credits per year). All you need is Internet access, and you can read the issues, take the CME tests, and print or save your CME certificate—all online.

Just notify the GSACEP office ([gsacep@aol.com](mailto:gsacep@aol.com)) of your deployment and your "preferred" e-mail address, and we'll take care of the rest.

Thank you for your service to our country.