



ACEP18 Daily News

SAN DIEGO CONVENTION CENTER • SAN DIEGO, CA • OCTOBER 1-4, 2018 • ACEP.ORG/ACEP18

TUESDAY ISSUE



MISS A POPULAR SESSION? WATCH IT ONLINE!

With the 50th anniversary celebration and our second largest attendance, some of this year's most popular courses have been difficult to get into.

These courses will be available for **free** online after the conference.

Details will be sent via email to all attendees soon.

COURSE CHANGES

Due to popularity, these Tuesday courses are moving to Ballroom 20B.

TU-102 Cruising the Literature: Trauma 2018, 8–8:50 a.m.

TU-117 Acute Decompensated Heart Failure: Time Critical Interventions, 9–9:50 a.m.

TU-134 Undifferentiated Shock: Making a Difference, 10–10:50 a.m.

TU-143 Advanced Recognition and Treatment of Bradycardias and Blocks, 12:30–1:20 p.m.

TU-165 ACEP@50: Past, Present, and Future (James D. Mills, Jr. Memorial Lecture), 1:30–2:20 p.m.

TU-177 FAST FACTS: Neuro Potporri, 3:30–4:20 p.m.

TU-193 Dysrhythmias and Syncope, 4:30–5:30 p.m.



JAMES ARONOVSKY

Superheroes of Medicine

ACEP18 General Session
celebrated the challenges
of emergency medicine

by RICHARD QUINN

SAN DIEGO—In high school, Mel Herbert, MD, MBBS, FAAEM, thought he was a superhero.

It was an escape, of course, from being bullied and ostracized. It was a fantasy, from a childhood ravaged by a violent father and an alcoholic mother. But real or not, one day he perched at the edge of the school roof, several stories up, willing to prove he could fly. If he did, the abuse would stop. His world would be better.

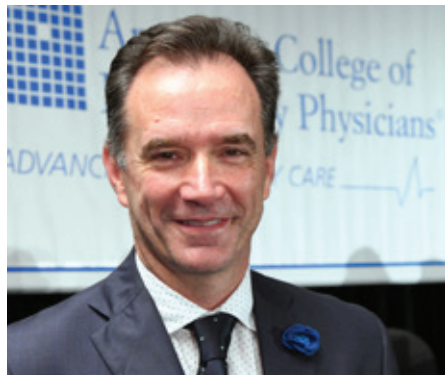
CONTINUED on page 1

QUALITY

ACEP Elects Dr. William Jaquis as President-Elect

WILLIAM JAQUIS, MD, FACEP, of Fort Lauderdale, Florida, was elected President-Elect during ACEP's Annual Meeting in San Diego, California.

**TURN TO PAGE 4
FOR MORE INFORMATION.**



ACEP



ROY SPENCE

GENERAL SESSION

The Power of Purpose

Roy Spence, co-founder and former CEO of GSD&M, the biggest advertising agency in Austin, will present a distillation of his 40-plus years in marketing, a career that saw his agency create advertising, like the iconic baby-back ribs jingle for Chili's restaurants and the famed "Don't Mess with Texas" anti-littering campaign for the Lone Star State.

Tuesday, 5:30–6:30 p.m. | Ballroom 20B
Great prize giveaways, including hotel and airline tickets!

PLUS

RESEARCH FORUM

INTEGRATE THE SCIENCE WITH THE EDUCATION

SEE PAGE 7



HOT SESSIONs

SEE PAGE 10



USE THE AI MUSEUM OF EM DOCENT APP

Get a personal guided tour to the Museum of EM, right from your phone. Compete in the trivia contest for a chance to win awesome prizes. To get started, text "Hello" to 619-272-2414.

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A Vifor Pharma Group Company

References: 1. Lennie TA, Chung ML, Moser DK. What should we tell patients with heart failure about sodium restriction and how should we counsel them? *Curr Heart Fail Rep.* 2013;10(3):219-226. doi:10.1007/s11897-013-0145-9. 2. Humalda JK, Navis G. Dietary sodium restriction: a neglected therapeutic opportunity in chronic kidney disease. *Curr Opin Nephrol Hypertens.* 2014;23(6):533-540. 3. Carubelli V, Metra M, Lund LH. Negotiating renal dysfunction when treating patients with heart failure. *Expert Rev Cardiovasc Ther.* 2018;16(2):113-122. doi:10.1080/14779072.2018.1422178. 4. Kidney Disease: Improving Global Outcomes (KDIGO) CKD Work Group. KDIGO 2012 clinical practice guideline for the evaluation and management of chronic kidney disease. *Kidney Int Suppl.* 2013;3(1):1-150.

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Two New Board Members Elected, Two Incumbents Re-Elected

The ACEP Council elected L. Anthony Cirillo, MD, FACEP (Rhode Island, left) and John T. Finnell, MD, FACEP, FACMI (Indiana, second from right) to the ACEP Board of Directors. Christopher S. Kang, MD, FACEP, FAWM (incumbent, Washington, second from left) and Mark Rosenberg, DO, FACEP (incumbent, New Jersey, right) were re-elected for their second terms.

ACEP Elects Dr. William Jaquis as President-Elect

William Jaquis, MD, FACEP, of Fort Lauderdale, Florida, was elected President-Elect Sunday during the ACEP Annual Meeting in San Diego, California. He was elected by ACEP’s Council to serve a 1-year term and will assume ACEP’s presidency at next year’s meeting in Denver, Colorado.

“The past five years have brought significant changes in health policy, market consolidation, and the role of social media to emergency medicine,” said Dr. Jaquis. “Failure to address issues such as prudent layperson and fair coverage will lead to broad-based changes to access to care for millions of emergency patients.”

Dr. Jaquis currently serves as the senior vice president of Envision Health’s East Florida Division. He’s also an attending physician at Aventura Medical Center in Aventura, Florida. He was voted to ACEP’s Board in 2012 and 2015. Dr. Jaquis has previously served as the organization’s Vice-President. Prior to that, he served as an active member of the Maryland ACEP Chapter for 16 years, including a term as President.

Dr. Jaquis earned his medical degree at the Medical College of Ohio and completed his residency at Case Western–Mt. Sinai Medical Center in Cleveland, Ohio. ➕

GENERAL SESSION | CONTINUED FROM PAGE 1

And if he couldn’t fly, that was somehow okay, too.

He didn’t jump. Instead, he went on to become an emergency physician, which, ironically, fulfilled his childhood fantasy.

Emergency medicine “makes you superheroes,” said Dr. Herbert, an attending physician and professor at LAC+USC Medical Center in Los Angeles. “You can’t fly, you don’t have a force field, but within the house of medicine, you are superheroes.”

Dr. Herbert, owner and editor of the popular EM:RAP audio program, led the 50th Anniversary General Session on a tour of the specialty’s magical journey—and his tortuous own. The session began with video vignettes and applause for some of the field’s elders, and then Dr. Herbert captivated a wall-to-wall crowd with stories of patients helped, mentors appreciated, and consultants mocked.

But mostly, he said thank you.

“We know [emergency medicine] is exhausting,” he said. “There’s nights and weekends. There’s sleep deprivation. There’s asshole consultants constantly. It’s a hard job. And the patients—despite what you do, it’s not like on TV. They come in and despite what you do, they don’t live lots of the time. And sometimes they don’t live because of what you do.

And sometimes you get sued. And it sucks.”

So, thank you for being superheroes in the face of it all, he said.

Pressure is a privilege, as the saying goes. And emergency physicians do it with grace. They save lives and skirt deaths, often by making lightning-quick decisions for which they’ve spent a lifetime preparing.

And then, one day, the ride needs to be over. Emergency physicians hang up their white coats for different reasons. For some, it’s burnout in their 40s. For others, retirement comes decades later.

But for Dr. Herbert, leaving the emergency department wasn’t the end. Not when he knows how he still responds every time the cliché is asked, “Is there a doctor in the house?”

“You may hang up this coat. This coat that you have worn together through exams, through nights, through weekends, through dealing with asshole consultants,” he said. “You may hang up that coat, but that coat, it doesn’t hang you up. Because that coat’s a cape.”

And capes are worn by superheroes. ➕

RICHARD QUINN is a freelance writer in New Jersey.

BE A WITNESS TO HISTORY

ACEP TURNS 50 THIS YEAR, and we want you to join us for a look back at the history of emergency medicine.

For full descriptions and information on all 50th anniversary activities, check the onsite program or the ACEP18 mobile app.

The Photo Booth

Tuesday-Wednesday, 8 a.m.-5:30 p.m.
Exhibit Lobby, San Diego Conference Center

Commemorate your experience with a special Photo Booth located near the Exhibit Lobby. Choose digital or print, grab a fun photo prop, pick a themed background, and strike a pose. When you're done, post your pic to social media (#ACEP50years, #ACEP18) or take your memory home to frame it. Remember to check out GE Healthcare's Image of the Day while you're there.

Sponsored by GE Healthcare.

The Museum of Emergency Medicine

Tuesday-Wednesday, 9 a.m.-5 p.m.
Ballroom 20 Foyer, San Diego Conference Center

Explore the history of ACEP and emergency medicine in our incredible interactive museum. Tour five decades of emergency medicine through photos, videos, stories and artifacts. Hear first-hand accounts of the fight to establish emergency medicine as a specialty from some of our 50-year members. Get a personal museum tour from our AI virtual docent chatbot and compete in a trivia contest, all from your phone. To get started, text "Hello" to 619-272-2414.

History of Military Emergency Medicine

Tuesday-Wednesday, 9:30 a.m.-3:30 p.m.
Exhibit Hall, San Diego Conference Center

The battlefield has served as a catalyst for emergency medicine as a distinct medical discipline and a crucible for refining existing medical knowledge. Government Services ACEP is proud to trace the evolution of military emergency medicine with a living walkthrough museum.

- Step past images of the Balad trauma bay doors and the floor of Trauma Bay II, into a Navy Shock Trauma Platoon tent equipped for patient care.
- See the evolution of portable ultrasound and experience the history of tourniquets from the Civil War up through Iraq and Afghanistan.
- Talk to Critical Care Air Transport



ACEP Executive Director Dean Wilkerson, JD, MBA, CAE; ACEP member since 1969 Rudenz "Rudy" T. Douthat, MD, FACEP; ACEP staff Jana Nelson; and 50th Anniversary Task Force chair Nicholas J. Jouriles, MD, FACEP, at the Museum of Emergency Medicine Ribbon Cutting ceremony.

Team emergency physicians who care for the critically wounded through the entire evacuation chain, from point of injury back to state-side.

- Learn about the history of battle-field medics and how their skills are being translated to civilian tactical EMS systems.
- Attend 10-minute mini lectures on the unique history of military emergency medicine and listen to Government Services ACEP members tell stories of providing emergency care to America's heroes.

Titan Talks

Hear from the past presidents and rebels of early emergency medicine.

Tuesday, 11 a.m.

Arthur L. Kellermann, MD, MPH, FACEP, founder and first chair of Emory School of Medicine's department of emergency medicine; elected to the Institute of Medicine; current Dean of School of Medicine at Uniformed Services University of Health Sciences (Army, Navy, Air Force, and Public Health Service).

Col. (ret.) Linda L. Lawrence, MD, FACEP, ACEP's 37th President and the first active-duty military officer to serve on ACEP's Board of Directors.

Nancy J. Auer, MD, FACEP, ACEP's 27th, and its first woman, President.

Tuesday, 11:30 a.m.

Leonard M. Riggs, Jr., MD, FACEP,

ACEP's 10th President and its earliest living President.

Brooks F. Bock, MD, FACEP, ACEP's 13th President and the first ACEP President with emergency medicine board certification and residency.

Tuesday, 2:30 p.m.

Gregory L. Henry, MD, FACEP, ACEP's 25th President.

Nicholas J. Jouriles, MD, FACEP, ACEP's 38th President and the 50th Anniversary Task Force Chair.

Golden Ticket Drawing

Tuesday, 3:15 p.m.

Ballroom 20 Foyer, San Diego Conference Center

Get your souvenir chocolate bar from Janssen at booth #2735 in the Exhibit Hall. If you get a golden ticket, you could win a fantastic prize package! Come to the Museum of Emergency Medicine at 3:15 p.m. for the daily drawing. The prize package includes: a Virtual ACEP18 subscription, \$50 in ACEP Bucks, and an autographed copy of *Bring 'Em All: Chaos. Care. Stories from Medicine's Front Line*, ACEP's 50th anniversary commemorative book. Exhibitors are not eligible for this promotion.

Supported by Janssen Pharmaceutical Companies of Johnson and Johnson.

Mission: ACEP—a Digital Scavenger Hunt

Let the hunt begin! Complete thrilling missions throughout the conference for the chance to be crowned champion.

The Books

ACEP Bookstore, Booth #1734, Exhibit Hall

Available in the Museum, Bookstore, and on ACEP.org. Take home the history!

Bring 'em All: Chaos. Care. Stories from Medicine's Front Line

Celebrate the depth and diversity of emergency medicine with ACEP's poignant anniversary book that shows how far the specialty has come in its relatively short, vibrant life.

Famed photographer Eugene Richards, author of *The Knife and Gun Club*, captures breathtaking moments in the lives and careers of emergency physicians through a collection of 50 inspiring photo essays in ACEP's commemorative anniversary book, *Bring 'em All: Chaos. Care. Stories from Medicine's Front Line*.

Anyone, Anything, Anytime—History of Emergency Medicine (2nd Edition)

The classic, updated with full-color photos and new interviews, the redesigned second edition of *Anyone, Anything, Anytime* takes an even deeper dive into the evolution of emergency medicine. With narratives from nearly 50 emergency medicine pioneers, prominent historian Brian J. Zink, MD, FACEP, explores the origins and remarkable transformation of the specialty from its early days following World War II through the sociopolitical changes of the 1950s, 1960s, and 1970s to the present day. ➕



DON'T MISS THESE innovatED EVENTS

InnovatED offers an unprecedented look at new technology, products, and services available to emergency medicine practitioners. Don't miss out on these exciting events.

Tuesday–Wednesday, 9:30 a.m.–3:30 p.m., Booth 1543, Exhibit Hall, San Diego Conference Center

OAC Reversal: “What Matters to ME ... A Patient Perspective”

11–11:15 a.m.

Presented by Todd Villines, MD, cardiologist, Uniformed Services University School of Medicine, Bethesda, Maryland, and patient representative

Do you understand what matters to patients on anti-coagulation therapy? Attend this session to hear this often-overlooked point of view directly from a patient.

It's My Patient, Too ... Bridging the Gap in OAC Decision Making

11:15–11:30 a.m.

Presented by James Williams, DO, FACEP, emergency physician, Covenant Medical Center, Lilburn, Georgia; and Dr. Villines

Perspectives from a cardiologist and emergency physician on the importance of reversal on clinical decision making.

Medical Device Pitch Event

11:45 a.m.–12:30 p.m.

Grab your seat at the Innovation Stage to hear from innovators who are changing the future of emergency medicine.

- CoLabs Medical
- HeartHero
- Incubation Science
- Kestrel Labs

Improving Work Flows for Hospice-Eligible Patients Presenting to the ED Through Rapid Identification, Evaluation, and Disposition

2:30–2:45 p.m.

Presented by Eric S. Shaban, MD, regional medical director, VITAS Healthcare, Glastonbury, Connecticut; and the ACEP Palliative Care Medicine Section

Reducing Avoidable Admissions for Atrial Fibrillation: Barriers, Innovations, and Opportunities

2:45–3 p.m.

Presented by Christopher Baugh MD, MBA medical director, department of emergency medicine, Brigham and Women's Hospital; associate professor, Harvard Medical School

Dr. Baugh discusses his experience and research highlighting how physicians in different institutions, health systems, and countries manage patients with atrial fibrillation in the emergency department. New outpatient pathways facilitate early cardioversion in eligible candidates and streamline safe transitions back into the community with appropriate anticoagulation regimens and follow-up clinic access.

Why Geriatric Emergency Department Accreditation?

3–3:15 p.m.

Presented by Kevin Biese, MD, MAT, FACEP, associate professor, vice-chair of academic affairs, clinical associate professor of internal medicine in the division of geriatrics, and co-director of the division of geriatric emergency medicine, University of North Carolina at Chapel Hill School of Medicine; and ACEP GEDA Board of Governor's Chair

Geriatric emergency departments promote best clinical practices for older adults and have the potential to improve health outcomes, coordinate care more effectively, and reduce cost of care. Hear how this accreditation system is changing the standard of care for our older adults. Sponsored by The John A. Hartford Foundation and West Health Institute.

Innovation Panel

3:15–3:30 p.m.

Investors will offer tips on how to jump start your idea and get it on the market. +

EMF Emergency Medicine Foundation
research → education → patient care

CHECK OUT THESE EMF EVENTS

The Emergency Medicine Foundation (EMF) is the charity of and for emergency physicians. Founded in 1972 by visionary leaders of ACEP, EMF promotes education and research that develops career emergency medicine researchers, improves patient care, and provides the basis for effective health policy. Throughout our 45-year history, EMF has provided more than \$16 million in funding to help enhance the specialty of emergency medicine. Learn more at emfoundation.org.

EMF Major Donor Lounge

Tuesday, 7 a.m.–4 p.m.

Wednesday, 7 a.m.–3 p.m.

San Diego Convention Center, Sails Pavilion

EMF donors who have given at least \$600 in 2018 can relax in this private room with complimentary breakfast, lunch, snacks, and business center amenities.

EMF Silent Auction

Tuesday–Wednesday, 9 a.m.–4 p.m.

San Diego Convention Center, Sails Pavilion

One-of-a-kind experiences, sports, music and celebrity memorabilia, art, jewelry, and more. Bid, buy, and support EMF to make a lasting impact on emergency medicine.

EMF Research Gathering Lounge

Tuesday, 9–11:30 a.m., 2–3:45 p.m.

San Diego Convention Center, Sails Pavilion

Network and review abstracts in this special Research Forum lounge.

EMF Grant Showcase Luncheon at the Research Forum

Tuesday, Oct. 2, Noon–1:45 p.m.

San Diego Convention Center, Sails Pavilion, EMF Research Gathering Room

See the future of emergency medicine with the most promising EMF grantees and their current projects.

Wiegenstein Legacy Society (WLS) Reception

Tuesday, Oct. 2, 6–8 p.m.

Manchester Grand Hyatt, Bayview

WLS members are invited to a reception to acknowledge individuals who have included EMF in their estate plans.

EMF–Annals Author's Workshop at Research Forum

Wednesday, Oct. 3, 9–11 a.m.

San Diego Convention Center, Sails Pavilion,

Join us for insights on getting published from the deputy editors of the *Annals of Emergency Medicine*. +

♦ - By invitation only



TAKE ADVANTAGE OF THE NEMPAC DONOR LOUNGE

The National Emergency Medicine Political Action Committee (NEMPAC) is a critical tool in ACEP's government affairs strategy to strengthen our influence on many legislative initiatives impacting the practice and delivery of emergency medical care. NEMPAC activities at ACEP18 will recognize the support of our most generous donors and highlight our agenda for the coming term.

Because of ACEP member support, NEMPAC has become one of the top medical PACs in the country and is a respected political voice in Washington, D.C.

NEMPAC "Give-a-Shift" Donor Lounge ♦
Tuesday–Wednesday, 8 a.m.–5 p.m.
San Diego Convention Center, Sails Pavilion

ACEP members who have donated at the "Give-a-Shift" level (\$1,200, or \$120 for residents) in 2018 are invited to visit and enjoy this private lounge with complimentary breakfast, lunch, snacks, professional neck and shoulder massages, television, and business center amenities. NEMPAC Board members and staff will be available to discuss NEMPAC's mission and activities in the 2018 mid-term elections.

For a full schedule of NEMPAC events, visit acep.org/acep18 or check the ACEP18 mobile app.

NEMPAC is nonpartisan and supports pro-emergency medicine candidates, not political parties. +

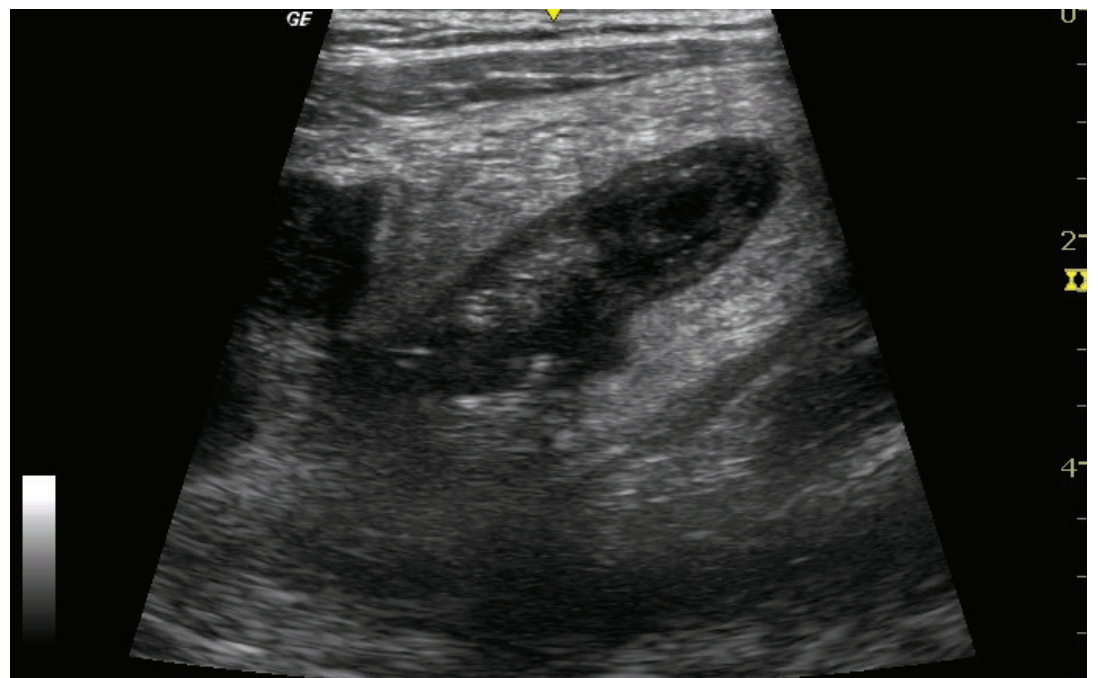
♦ - By invitation only

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Stop by the ACEP Photo Booth near the main entrance of the Exhibit Hall to answer the Image of the Day question for your chance to win a textbook, compliments of GE Healthcare. +

SATELLITE SYMPOSIA OFFER EVEN MORE EDUCATION OPTIONS

Industry-sponsored satellite symposia are educational, and some offer CME credit. This program is not a part of the official ACEP18 education program as planned by ACEP's educational meetings committee.

Is That IV Necessary? Advances in Pain Management in the ED

Grantor: Acclrx Pharmaceuticals, Inc.

6–8 a.m. (registration, breakfast, and program)
 Grand Hall A, Lobby, Manchester Grand Hyatt

Pain is the most common reason people visit the emergency department. IV opioids such as morphine and fentanyl have long been the mainstay of treatment for moderate-to-severe acute pain; however, IV drug administration can require significant ED resources (bed, nurse, equipment, etc.). During busy periods, these resources may be limited, thereby presenting a significant barrier to timely pain relief for patients. Novel classes of analgesics have recently been introduced and could offer potential advantages in settings where immediate IV access may be difficult. Join our experts, James Miner, MD, and Zubaid Rafique, MD, as they review the evolving landscape of emergency medicine acute pain management. Clinical

trial-derived efficacy, safety, and pharmacokinetic data will be briefly discussed, with attention given to adverse events, their identification and management strategies. This educational opportunity features case-based presentations with an interactive Q&A session intended to maximize attendee learning.

A Virtual Reality View—Optimizing Immuno-Oncology Therapy Through the Management of Immune-Related Adverse Events: The Role of Emergency Physicians

Grantors: Bristol-Myers Squibb and Merck & Co.

6–8 a.m. (registration, breakfast, and program)
 San Diego Ballroom Lobby, Marriott Marquis

Among the standard approaches to cancer treatment, including surgery, radiation, chemotherapy, and targeted therapy, immunotherapy has emerged as a different, promising modality to fight cancer. Among immunotherapies, a new class of agents called immune checkpoint inhibitors have revolutionized the approach to many advanced malignancies. Unlike chemotherapy, these agents do not directly attack cancer cells, but block key negative regulators of the immune system

and reactivate its ability to attack and fight the tumor. The most important immune regulators are cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4), programmed cell death protein (PD-1), and its ligand PD-L1. Often tumors exploit the immune checkpoints during T-cell priming or T-cell activation in the tumor microenvironment. Several immunotherapeutic agents are now U.S. Food and Drug Administration approved, with several more in clinical trials. A new spectrum of inflammatory toxicities, called immune-related adverse events (IRAEs), has emerged, unique to the immune checkpoint blockade, that potentially affects any organ system.

Given the rapid increase in the use of these agents, emergency physicians must become familiar with immune checkpoint inhibitors, able to recognize associated IRAEs, and up to date with new guidelines on their management by a multidisciplinary team. Join our cancer expert, Arjun Balar, MD, as he reviews the evolving landscape of cancer immunotherapy and the crucial importance of recognition and management of IRAEs. Clinical efficacy and safety data across tumor types will be discussed, with special attention to the different types and severity of IRAEs and identification and management strategies. This CME activity features an interactive case-based presentation, including virtual reality animations, followed by a Q&A session that encourages

attendees to maximize their learnings as they apply to clinical practice.

Urgent Warfarin Reversal Interactive Case Studies: Because Every Second Counts

Grantor: CSL Behring

6–9 p.m.
 San Diego Ballroom Lobby, Marriott Marquis

When a patient requires urgent warfarin reversal and a decision must be made quickly, there's only one option: 4-factor prothrombin complex concentrate (4F-PCC).

Join us for an interactive session as experts in anticoagulant reversal discuss the demands and challenges of urgent warfarin reversal and the role of 4F-PCC in emergency medicine. Attendees will move in small groups to explore:

- The use of 4F-PCC in patients with acute major bleeding.
- The use of 4F-PCC in patients requiring urgent surgery or invasive procedures.
- Clinical practice guidelines for the use of 4F-PCC to reverse the effects of warfarin.
- Dosing and administration of 4F-PCC.

For program objectives, accreditation, and credit designation statements, please check the onsite program or the ACEP18 mobile app. +

Integrate the Science with the Education at ACEP's Research Forum

THIS YEAR'S THREE-DAY ELECTRONIC SHOW-CASE is better than ever. Research Forum abstracts will be available to view near the course rooms and arranged by subject matter to enhance your learning experience.

View and discuss original research that will impact your daily practice on the topics and issues that matter most to you and your patients. See the Onsite Program beginning on page 44 for details.



NIDA: Addressing the Opioid Crisis: NIH Research Initiatives and Opportunities for EPs as Researchers and Innovative Practitioners
8-9 a.m.
Sails Pavilion

EMF Research Gathering Room
9-11:30 a.m.
Sails Pavilion

- Electronic Presentations**
9-10:15 a.m.
- Geriatrics/Palliative/End-Of-Life Care Room 23A
 - Ultrasound Room 24A
 - Infectious Diseases Room 25A
 - Pediatrics Room 32A
 - Quality Improvement and Patient Safety Room 32B
- 10:45 a.m.-noon
- Geriatrics/Palliative and End-of-Life Care Room 23A
 - Ultrasound Room Room 24A
 - Infectious Diseases Room Room 25A
 - Pediatrics Room Room 32A
 - Simulation Room 32b

EMF Showcase Luncheon
Noon-1 p.m.
Sails Pavilion

State-Of-The-Art: Telemedicine: What We All Will Be Doing 30 Years from Now?
2-3 p.m.
Room 32B

EMF Research Gathering Room
2-3:45 p.m.
Sails Pavilion

Plenary Session II: New and Noteworthy
3-4 p.m.
Sails Pavilion

- Electronic Presentations**
4-5 p.m.
- Geriatrics/Palliative and End-of-Life Care Room 23A
 - Pain Management Room 24A
 - Disaster Medicine/EMS Room 25A
 - Trauma Room 32A
 - Simulation Room 32B
- 5-6 p.m.
- Social EM Room 23A
 - Pain Management Room 24A
 - Disaster Medicine/EMS Room 25A
 - Trauma Room 32A
 - Telemedicine/Informatics Room 32B

Work Hard, Play Hard with EMRA

The Emergency Medicine Residents Association (EMRA) activities at ACEP18 begin today with a hardcore simulation competition and finish the day with an epic party. EMRA events come at no charge to residents and medical students. Here is Tuesday's lineup:

EMRA Hangouts LIVE
8 a.m.-6 p.m.

Miramar, South Tower, 3rd floor, Marriott Marquis

Resident SimWars Competition

9 a.m.-3 p.m.

Marina Ballroom Salon F, Level 3, South Tower, Marriott Marquis

EMRA Party at PARQ

10 p.m.-2 a.m.

PARQ Nightclub, 615 Broadway



Celebrate

the depth and diversity of emergency medicine

Bring 'em All: Chaos. Care. Stories from Medicine's Front Line.
Commemorating ACEP's 50th Anniversary



50 photo essays by renowned photojournalist Eugene Richards, author of *The Knife and Gun Club*



American College of
Emergency Physicians®
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JAMES ARONOVSKY

Q: WHAT BRINGS YOU TO ACEP18?

"It's a wonderful opportunity to bring our specialty together, especially to celebrate 50 years of a specialty that is really on the front line of serving vulnerable populations...[and] I think being able to have everything accessible under one roof allows us to easily interact and connect with those around us. It really gives us that team feel we're used to within our emergency departments."

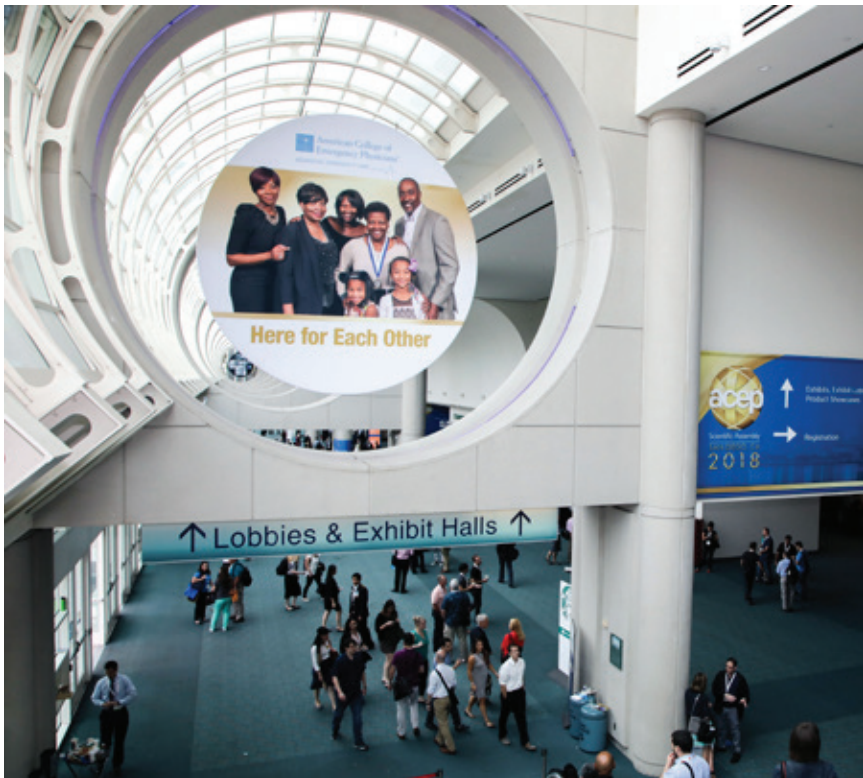
- Renee Salas, MD, MPH, MS, clinical instructor of emergency medicine at Harvard Medical School and emergency physician at Massachusetts General Hospital, both in Boston



Live from ACEP18



JAMES ARONOVSKY



GLOBAL ATTENDANCE

Each year, ACEP hosts a large contingent of international physicians at our annual meeting.

This year, more than 800 physicians from 60 countries are attending ACEP18. As of Sept. 18, the international attendee country breakdown was:

Argentina	2
Australia	52
Bahamas	6
Barbados	1
Belgium	1
Bermuda	2
Brazil	16
Canada	345
Cayman Islands	1
Chile	11
China	4
Colombia	3
Costa Rica	24
Denmark	3
Dominica	1
Dominican Republic	2
Ecuador	6
Egypt	1
Finland	3
France	5
Germany	1
Ghana	1
Guyana	5
Haiti	14
Honduras	1
Hong Kong	3
Iceland	10
India	7
Indonesia	1
Ireland	8
Israel	5
Italy	5
Jamaica	9
Japan	13
Korea, Republic of	41
Kuwait	2
Kyrgyzstan	1
Mexico	8
Netherlands	40
Netherlands Antilles	2
New Zealand	20
Norway	2
Panama	1
Peru	2
Philippines	11
Qatar	21
Rwanda	1
Saudi Arabia	30
Singapore	4
South Africa	5
Spain	1
Sweden	9
Switzerland	4
Taiwan	28
Tanzania, United Republic of	3
Thailand	4
Turkey	6
Turks and Caicos Islands	2
United Arab Emirates	19
United Kingdom	10
Grand Total	849

INTERNATIONAL SCHOLARSHIPS

EM:RAP Go and ACEP teamed up to give ACEP18 registration scholarships to 20 international emergency physicians. This year, a contingent from Haiti, Guyana, and Chile is attending.



Hot Sessions in San Diego

Get a Grip on Identifying Dislocations and Reduction Techniques

by KAREN APPOLD

In her 30-minute rapid-fire session “Difficult Dislocations,” Danielle D. Campagne, MD, FACEP, an emergency physician at the University of California San Francisco–Fresno, will discuss tips and tricks to diagnose and treat difficult dislocations of the shoulder, jaw, hip, and ankle.

“Dislocations are a common orthopedic complaint in the emergency department,” Dr. Campagne said. “I will provide some pointers on diagnosing different joint dislocations, discuss multiple reduction techniques, and show some videos that demonstrate how to do them properly.”

“I hope emergency physicians will leave my session with new techniques and a better understanding of which methods work best for different patients.”

—Danielle D. Campagne, MD, FACEP

Dr. Campagne said it’s good to have an arsenal of difficult techniques because depending on a physician’s body type and health, such as being small or having a back issue, certain techniques—such as those that involve lifting—may be prohibitive. Likewise, depending on a patient’s mobility and weight, physicians may be limited to certain techniques.

“I hope emergency physicians will leave my session with new techniques and a better understanding of which methods work best for different patients,” Dr. Campagne said.

“Orthopedics has become my niche,” she said. “I have talked on similar orthopedic topics the past few years at ACEP meetings.” In October, her book, *Emergency Medicine Board Review*, which includes a section on orthopedics, will be published. +

KAREN APPOLD is a journalist based in Lehigh Valley, Pennsylvania.



Dr. Campagne

DIFFICULT DISLOCATIONS
Tuesday, Oct. 2
10–10:25 a.m.
SDCC, Room 29A

Red Eye: Just Conjunctivitis or a Serious Problem?

by RICHARD QUINN

Patients presenting with an acute red eye are common in the emergency department. Megan Boysen Osborn, MD, FACEP, has worked up a checklist that tells emergency physicians what they need to look for—no pun intended.

The following queries will be presented at her session, “Discharge or Disaster? Differentiating Between Harmless and Dangerous Causes of the Acute Red Eye.” They are:

- Does the patient have pain in his or her eye, and is that pain more than mild?
- Is there fluorescein uptake on the fluorescein exam?
- Do they have cells and flare in the anterior chamber?
- Do they have elevated intraocular pressure?
- Is there any decreased visual acuity?

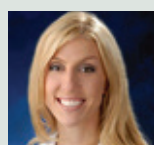
“If the answer to all of those questions is no, then you are pretty safe to discharge that patient home to follow up as needed,” said Dr. Osborn, vice chair of education and residency program director for emergency medicine at University of California Irvine Health in Orange. “If a patient has pain associated with their acute red eye, they definitely need a more detailed ophthalmologic examination, including fluorescein.”

One issue is emergency physicians assuming an acute red eye is “probably just conjunctivitis,” Dr. Osborn said.

“Patients with benign eye conditions shouldn’t have more than a mild irritation,” she said. “I had a patient one time who appeared to have conjunctivitis, but he endorsed a moderate level of pain. So, sure enough on fluorescein exam, he had a viral keratitis from a herpes virus. That is something we would not have wanted to miss in the emergency department.”

“When you are evaluating a patient with an acute red eye,” Dr. Osborn said, “the presence or absence of pain is a very important feature.” +

RICHARD QUINN is a freelance writer in New Jersey.



Dr. Osborn

DISCHARGE OR DISASTER? DIFFERENTIATING BETWEEN HARMLESS AND DANGEROUS CAUSES OF THE ACUTE RED EYE
Tuesday, Oct. 2
10:30–10:55 a.m.
SDCC, Room 28A

Focus on the Peri-Cardiac Arrest Period to Improve Clinical Outcomes

by VANESSA CACERES

A patient in the peri-arrest period—in other words, the “crashing” patient—can have an opportunity for significant improvement in outcomes compared with a patient in cardiac arrest. The session “The Crashing Patient: Pearls for the Pre- and Post-Arrest Period” will present some critical considerations and interventions emergency physicians can make with patients in the pre- and post-cardiac arrest period.

Patients in the peri-arrest period “are high-risk patients who have either survived their immediate arrests or are at greater risk for arrest based on their clinical condition. Recognition is critical to aligning resources for these patients to assure the best chance at survival and meaningful recovery,” said presenter Peter M. DeBlieux, MD, FACEP, professor of clinical medicine in the section of emergency medicine at the Louisiana State University Health School of Medicine in New Orleans.

“Rapid assessment and treatment of the critically ill patient includes navigating the transition of care from the emergency department to the ICU or [operating room]. Our ability to anticipate the patient’s clinical course and communicate our treatment plan and goals of care can improve clinical outcomes,” Dr. DeBlieux said.

He shared an example of an intervention he will discuss at his presentation: Once a patient has received an endotracheal tube for airway protection, “often clinicians allow respiratory technicians to decide the best ventilator settings. However, these decisions may not be based on the best level of evidence. Utilizing normal ventilatory rates and low tidal volume settings can save lives and reduce patient harm,” Dr. DeBlieux said. +

VANESSA CACERES is a freelance medical writer and editor based in Florida.



Dr. DeBlieux

THE CRASHING PATIENT: PEARLS FOR THE PRE- AND POST-ARREST PERIOD
Tuesday, Oct. 2
12:30–1:20 p.m.
SDCC, Room 11A

How to Recognize Posterior Strokes

by VANESSA CACERES

Anterior circulation strokes are commonly considered by emergency physicians, but the signs of posterior stroke can be missed. The session “Posterior Strokes: A Dizzying Differential” will help by raising awareness of the presentation of posterior strokes.

“Posterior circulation strokes can present in a subtler manner than anterior circulation strokes,” said Rachel E. Garvin, MD, emergency physician and neurointensivist at the University of Texas Health Science Center in San Antonio. “As emergency medicine providers, we know to call a stroke alert for the patient presenting with gaze preference and hemiplegia, but nausea, vomiting, and dizziness usually don’t prompt that line of thinking.”

Dr. Garvin’s session will use a step-by-step approach to review the clues to help pick up posterior circulation stroke. For instance, she’ll talk about the association between feeling weak and dizzy and a posterior stroke. “Feeling weak and dizzy are common chief complaints, but in older patients or patients with stroke factors, a good history and physical exam are crucial when patients present with those symptoms,” she said.

Dr. Garvin also will address the importance of a thorough neurologic exam to pick up subtle weakness or cranial nerve findings. “Cranial nerve exam is key for posterior circulation strokes as unless you just hit the cerebellum, there will be cranial nerve findings,” she said.

However, the neurologic exam does not need to be time-consuming. “This doesn’t necessarily mean you need to take 30 minutes to examine the patient,” she said. “We will go over the anatomy and physiology of the posterior circulation so you will have the knowledge to know where to focus that all-important physical exam.” +

VANESSA CACERES is a freelance medical writer and editor based in Florida.



Dr. Garvin

POSTERIOR STROKES: A DIZZYING DIFFERENTIAL
Tuesday, Oct. 2
1:30–1:55 p.m.
SDCC, Room 28A

Successfully Perform Awake Intubations
by KAREN APPOLD

Performing an intubation while a patient is awake can be nerve-wracking, so emergency physicians should prioritize learning how to do awake intubations so they feel routine.

In her presentation, “Paranoid to Paralyze: How to Safely Perform Awake Intubations,” Amy F. Ho, MD, assistant medical director at


“Practicing awake intubations over and over is a great mental exercise to improve your chances of success when a paralytic may be too dangerous to use.”
—Amy F. Ho, MD

John Peter Smith Hospital in Fort Worth, Texas, will discuss tricks of the trade for doing awake intubations so emergency physicians aren’t left scrambling at the last minute on a difficult airway.

Dr. Ho will give recommendations related to proper set up and anesthesia, plus the use of adjuncts and scalpels. She will also provide strategies for maximizing your chances of success, such as having multiple anesthesia modalities and having an extra hand to hold the patient’s head and tongue in an ideal position. She’ll also offer tips for using disposable scopes.

“Practicing awake intubations over and over is a great mental exercise to improve your chances of success when a paralytic may be too dangerous to use,” said Dr. Ho, whose educational session will also include many example photographs as visual aids. “This has been one of my favorite skills to teach my residents and practice on my own when given the chance.”

KAREN APPOLD is a journalist based in Lehigh Valley, Pennsylvania.



Dr. Ho

PARANOID TO PARALYZE: HOW TO SAFELY PERFORM AWAKE INTUBATIONS
Tuesday, Oct. 2
3:30-3:55 p.m.
SDCC, Room 28A

Diagnose the Cause of Syncope—You Could Save a Life
by RICHARD QUINN

According to Amal Mattu, MD, FACEP, patients who present in an emergency department with syncope may be the lucky ones.

“Syncope and sudden cardiac death are oftentimes the same disease along the spectrum of how lucky you are,” said Dr. Mattu, professor of emergency medicine at the University of Maryland Medical Center in Baltimore. “If you don’t make the diagnosis, the next time the patient has a syncopal episode, [they] might not be lucky enough to wake up.”

In his session “Dysrhythmias and Syncope,” Dr. Mattu will focus mostly on syncope and will highlight six potential red flags emergency physicians need to look for on electrocardiograms (ECG): Wolff-Parkinson-White syndrome, prolonged QT, Brugada syndrome, hypertrophic cardiomyopathy, arrhythmogenic right ventricular cardiomy-

“If you don’t make the diagnosis, the next time the patient has a syncopal episode, [they] might not be lucky enough to wake up.”
—Amal Mattu, MD, FACEP

opathy, and atrial septal defect.

Dr. Mattu noted that all patients presenting with syncope should be given an ECG, as its value as a diagnostic tool is unrivaled for those patients.

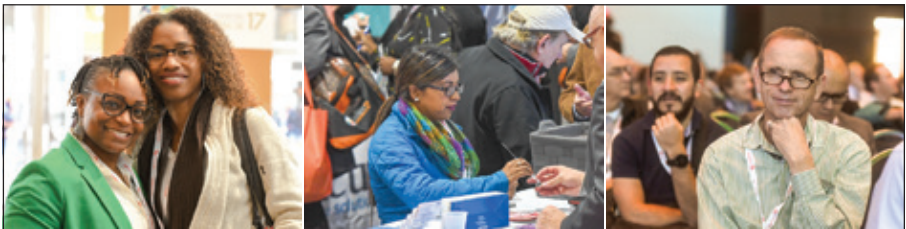
“The ECG is definitely the most important test we get in patients that have syncope,” Dr. Mattu said. “There’s really no other lab test, X-ray, CT scan, Holter monitoring, or any other test at all that needs to be as routinely done...the ECG is so important.”

RICHARD QUINN is a freelance writer in New Jersey.



Dr. Mattu

DYSRHYTHMIAS AND SYNCOPES
Tuesday, Oct. 2
4:30-5:30 p.m.
SDCC, Ballroom 20B



Save These Dates
ACEP's Upcoming Educational Meetings
Spring 2019

February 4-8, 2019
Emergency Department Directors Academy - Phase I
Omni Park West - Dallas, TX
acep.org/edda



February 24-28, 2019
Reimbursement & Coding Conferences
Caesar's Palace - Las Vegas, NV
acep.org/rc



March 19-21, 2019
Advanced Pediatric Emergency Medicine Assembly
Disneyland - Anaheim, CA
acep.org/pem



April 29-May 3, 2019
Emergency Department Directors Academy - Phase II
Omni Park West - Dallas, TX
acep.org/edda



May 5-8, 2019
Leadership & Advocacy Conference
Grand Hyatt - Washington, DC
acep.org/lac





Hot Sessions Monday Recap

Five Tips for X-Ray Interpretation

by ART HSIEH

SAN DIEGO—Although the use of X-rays as a diagnostic tool has been around since 1895, being able to rapidly and accurately read radiographic images remains a mainstay tool in the emergency physician's diagnostic toolbox, said Daniel Kim, MD, FRCPC, ultrasound fellowship director at the University of British Columbia and attending emergency physician at Vancouver General Hospital, both in Vancouver. During his morning presentation at ACEP18, Dr. Kim framed the use of X-rays as a way to not only be the basis of an initial differential suspicion, but as a gateway to definitive imaging procedures such as ultrasound and CT.



Dr. Kim

Dr. Kim used a series of case studies to provide five tips for interpreting X-rays. To begin, the emergency physician should always read their own films. A radiologist's interpretation can be significantly delayed when time is critical to patient outcome. Moreover, integrating patient history and physical findings with the X-ray can better situate the diagnosis. A case of pneumomediastinum in a young male complaining of pleuritic chest pain was used to illuminate this point. The initial impression by the radiologist revealed an unremarkable assessment. However, a closer inspection revealed the presence of the free air along the left heart border.

Emergency physicians should compare the new film to old X-rays whenever possible. A 56-year-old female with shortness of breath had clear breath sounds, which seemed inconsistent with her past history of asthma. A comparison of a previous recent X-ray indicated a new onset of cardiomegaly. Follow up with ultrasound indicated a pericardial effusion.

Next, it's essential to know normal X-ray anatomy. Dr. Kim used a case of a middle-aged male experiencing chest pain, with a widened mediastinum found on X-ray to suspect an aortic dissection that was confirmed with ultrasound. A widened mediastinum is a radiographic finding that can be caused by a myriad of conditions, including aortic aneurysm, aortic dissection, esophageal rupture, cardiac tamponade, and pericardial effusion.

As common as X-rays are, it's essential to know their limitations. A case study in necrotizing fasciitis illuminated the fact that a CT scan is more sensitive (89 percent) in detecting this potentially life-threatening condition as

compared to an X-ray (49 percent). Finally, acquiring at least two views of the area in question is vital. Dr. Kim showed a single, fairly unremarkable anterior view of the shoulder joint for a patient who woke up with pain in the area. However, the second image revealed a posterior dislocation, which is rare compared to anterior dislocations. If the diagnosis is uncertain, ordering a CT will be needed to confirm the suspicion.

"At the end of the day, practice, practice, practice is really the best way" to hone one's skill in reading X-ray film, concluded Dr. Kim. There are many resources on the web and in print to help refine this valuable skill. ➔

ART HSIEH is a paramedic, educator, and writer based in Northern California.

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Strategies to Manage Dental Pain

by ART HSIEH

SAN DIEGO—The numerous pathologies that cause dental pain can be dizzying. But the approach to tooth pain in the emergency department can be framed with a relatively simple approach that can result in more precise immediate care and more accurate referrals, according to Joan Noelker, MD, MACM, assistant professor in emergency medicine at Washington University in St. Louis. During her Monday presentation at ACEP18, Dr. Noelker provided a straightforward approach to identifying and managing conditions related to teeth discomfort.



Dr. Noelker

Numerous dental and nondental conditions cause tooth discomfort. Superficial injuries such as a chipped tooth or enamel rarely cause pain, and usually require minimal emergency department treatment. Conditions affecting the dentin usually result in heat/cold discomfort. Constant, debilitating pain likely involves the interior pulp portion of the tooth, requiring a more immediate referral to a dentist. Underlying bone involvement requires a surgical consultation for a potentially emergent situation.

Dr. Noelker grouped the dental etiologies into several categories. Traumatic tooth injuries require careful evaluation for associated damage to bony structures. Infections are among the more common conditions seen in the emergency department, ranging from minor infections that are managed with oral antibiotics, to serious conditions like trench mouth or Ludwig's angina. A CT with contrast may be needed, along with IV antibiotics and emergent surgery.

Inflammatory processes include conditions such as stomatitis and patients with ear, nose, and throat cancer conditions with a post-radiation inflammatory reaction. Suspect neoplastic causes in patients with normal appearing teeth who are complaining of dental pain. A sinus malignancy or a cancer forming in the floor of the mouth may be the culprit. Referred tooth pain may be caused by a cardiac issue or other serious source.

Dental bleeding is rarely life threatening, even when the patient is on anticoagulants. After ensuring airway patency, simple direct pressure on the site will generally control nearly all forms of dental bleeding. Dr. Noelker suggested that the easiest and most effective approach is to have the patient bite down with moderate pressure on a gauze if the opposing teeth are available. Keep suction nearby as the bleeding may cause patient distress. The emergency physician may need to consider adjunctive therapy if the bleed is not readily controlled, such as wetting the gauze with

tranexamic acid, using Surgicell, or injecting a mixture of epinephrine and lidocaine to the site. Review the patient's history for any bleeding disorders. If the patient is on thinners, determining which one the patient is prescribed will help determine the appropriate reversal agent.

Effective pain management strategies beyond opioid and nonopioid strategies include topical anesthetics and dental blocks. A combination of 10% lidocaine mixed with 20% benzocaine applied topically can be effective in calming tooth pain. Five common dental blocks also can be used by the emergency physician to control deep-seated tooth pain, including the inferior alveolar nerve block. ➔

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For Concussions, Honesty is the Best Policy

by RICHARD QUINN

SAN DIEGO—The parlance of concussions is sports medicine, as that is the specialty that has done the most research. Picture the parents of a young athlete—a star athlete in their parent's eyes—asking you about a head injury that just took place.



Dr. Perron

"Do they have a concussion?" "How long will it last?" "When can they play again?"

Now, take the advice of emergency physician Andrew Perron, MD, FACEP, and be honest with them. "We have to set some ground rules," said

Dr. Perron, residency program director at the Maine Medical Center in Portland in his ACEP18 Monday session, "Concussion Update 2018: What We Know, What We Think We Know, and What We Don't Know." "There is a lot more unknown about concussion than there is known, and that frustrates people. What we have to accept...is that there is just a lot of concussion stuff we don't know."

That's not to say Dr. Perron's annual presentation lacked clinical pearls. The first misconception he seeks to correct is that a concussion is a one-time event, or as some say, "just a bop on the head." It's not. It's a process. "Concussions scramble the brain in a way that we don't really understand," Dr. Perron said, adding that "the process goes on from

the 'bop' and can go on for hours, days, or weeks."

Dr. Perron adds emergency physicians should work to be current on changing literature. Take the subject of cognitive rest. As recently as five years ago, conventional wisdom suggested patients should avoid cognitive activities to let the brain repair itself. More recently, new studies suggest the brain may be better serviced with post-trauma exertion, similar to other body parts.

"We knew for sure that if you had a brain injury, the only thing we have to offer is rest the brain," Dr. Perron said. "Over the past few years, [our understanding has] really changed....maybe the brain is more like the rest of the body and not some special unique organ

that can't be touched once it has an injury."

Dr. Perron said some parents and patients are more concerned with concussions because of headlines about chronic traumatic encephalopathy (CTE) and its prevalence in the NFL. His advice when talking to worried people is, again, to be honest about what is known and unknown.

"This is a complex problem that we do not fully understand," He said. "We do not know everything about concussions. We know more than we knew 10 years ago, but there's a lot more to know." ➔

RICHARD QUINN is a freelance writer in New Jersey.

ACEP HONORS GROUPS IN THE 100% CLUB

ACEP’s Group Recognition Program is a great way to show your employees that you care about their continued success. This year, there are over 140 groups in ACEP’s 100% Club. If your group is interested in participating in ACEP’s Group Recognition Program, please visit ACEP18 registration.

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Preston MD & McMillin MD PC
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Raleigh Emergency Medicine Associates
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Improve Quality with CEDR and E-QUAL



JAMES ARONOVSKY

As part of its ongoing commitment to providing the highest quality of emergency care, ACEP has developed the Clinical Emergency Data Registry (CEDR) and the Emergency Quality Network (E-QUAL). These first-of-their-kind networks support emergency physicians' efforts to improve quality and practice in all types of emergency departments, even as practice and payment policies change over the coming years.

Exhibit Lobby

Tuesday–Wednesday, 8 a.m.–5:30 p.m.

San Diego Conference Center

CEDR

As part of its ongoing commitment to providing the highest quality of emergency medicine care, ACEP developed



CEDR. CEDR is the first emergency medicine specialty-wide registry to support emergency physicians' efforts to improve quality and practice in all types of emergency departments, even as practice and payment policies change. CEDR has been approved by the Centers for Medicare and Medicaid Services (CMS) as a qualified clinical data registry and provides a unified method for ACEP members to collect and submit Physician Quality Reporting System data, maintenance of certification (MOC), ongoing professional practice evaluation, and other local and national quality initiatives. Visit our booth for demonstrations, questions, and more.

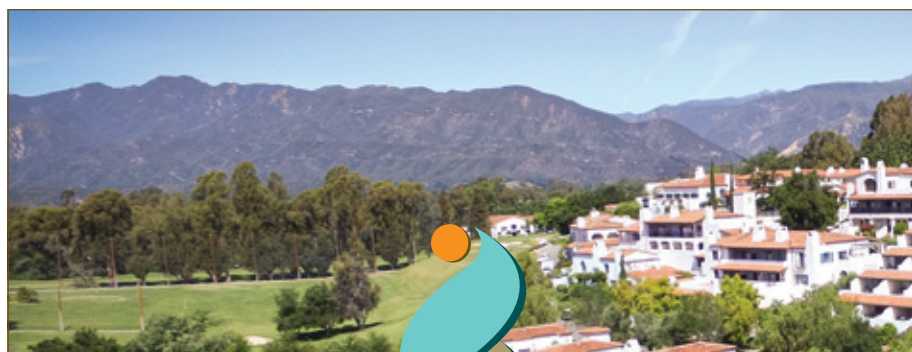
E-QUAL

E-QUAL is designed to support the CMS Transforming Clinical Practice Initiative, to engage emergency medicine clinicians and their emergency departments in improving clinical

outcomes, coordination of care, and reduced costs by:

- Improving outcomes for patients with sepsis.
- Reducing avoidable imaging with ACEP's Choosing Wisely recommendations.
- Reducing avoidable admissions in low-risk patients with chest pain.
- Improving implementation of best practices for opioid prescribing in the emergency department.

Participation in E-QUAL demonstrates the importance of emergency medicine. You'll also earn improvement activity credit for the merit based incentive payment system program, MOC Part IV credit, free eCME, and more resources and guidelines in the E-QUAL toolkits. Visit our booth to learn what E-QUAL can do for you. ➕



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Critical Care Airway

by ART HSIEH

SAN DIEGO—What do you do when your obese, medically fragile patient presents profoundly short of breath? This was the scenario that Michael Winters, MD, MBA, FACEP, professor of emergency medicine and medicine at the University of Maryland School of Medicine in Baltimore, used to present current research in critical care medicine with significant relevance to the practice of the emergency medicine physician in his Monday session, "Cruising the Literature: Top Articles in Critical Care."

Noninvasive ventilation (NIV) techniques such as bilevel positive airway pressure and continuous positive airway pressure are useful for cases of acute chronic obstructive pulmonary disease and congestive heart failure where patients are experiencing significant respiratory distress. However, in situations such as pneumonia, the delay caused by prolonged use of noninvasive ventilation to more definite airway management via endotracheal intubation, can result in higher intubation rates and worse 90-day mortality compared to patients who received high flow oxygen via nasal cannula. It appears that the patients who are most apt to benefit from early intubation are obese, remain tachypneic and tachycardic an hour after admission, and have high expiratory volume an hour (greater than 9 ml/kg predicted body weight) after implementing NIV.

Intubating a crash airway is fraught with risk, according to Dr. Winters. A randomized clinical trial reported in JAMA earlier this year indicated that the use of an endotracheal introducer or bougie stick in a first time intubation attempt resulted in a significantly higher

success rate when compared to the traditional endotracheal stylet. This is especially true in patients with at least one difficult airway marker, such as obesity, obstructed airway or edema, short neck, or small mandible. A bougie may also be very helpful in situations where the glottis opening is partly obscured or where cervical precautions are present.

Many emergency physicians have experienced situations where patients arrest during intubation. An ICU study published in indicated a 2.7 percent cardiac arrest rate occurred during the intubation procedure. Common predisposing factors included hypotension, hypoxemia prior to intubation, absence of pre-oxygenation, obesity, and age over 75 years. A comparison of 28-day mortality rates between intubated-related and nonintubated-related cardiac arrest showed a much higher rate among those who were intubated. The researchers concluded that intubation of a critically ill patient was an independent risk factor for 28-day mortality.

A pearl in critical care medicine is to "resuscitate before intubate," said Dr. Winters. One very common resuscitation approach is volume resuscitation using a crystalloid fluid. A recent ICU study conducted by Vanderbilt University compared the outcomes of ICU patients who received normal saline versus those who received a balanced crystalloid such as lactated ringers or plasmalyte. Those who received a balanced solution were at less risk for a major adverse kidney effect compared to the saline group at 30 days, and experienced reduced mortality secondary to sepsis. ➕

Product and Service Showcases Keep You Up To Speed

ACEP is proud to bring you the newly re-vamped Product Showcase in the Exhibit Hall. These educational and product-oriented sessions provide you with an in-depth presentation on a product or service you may have seen on the exhibit floor. Show up early! Seating is limited to 150 and a boxed meal will be served at each event.

GRIFOLS

Tuesday, 11:30 a.m.-12:15 p.m.
Ballroom 20A, San Diego Conference Center

The Rabies Threat in the U.S. and the Role of Postexposure Prophylaxis

Speaker: Charles Rupprecht, VMD, MS, PhD

This educational program will cover the prevalence of rabies in the United States, pathogenesis, diagnosis, and the most up-to-date treatment guidelines and best practices.

JANSSEN PHARMACEUTICALS

Tuesday, 11:30 a.m.-12:15 p.m.
Product Showcase 1, Near Booth #2605, Exhibit Hall, San Diego Conference Center

An Evidence-Based Approach to Treatment of DVT/PE and Reducing the Risk of Recurrence

Speaker: Greg Fermann, MD

This lecture will discuss treatment options for patients with deep vein thrombosis (DVT) and pulmonary embolism (PE), and how they may reduce the risk of recurrent thrombotic events.

THERMO FISHER

Tuesday, 11:30 a.m.-12:15 p.m.
Product Showcase 2, Near Booth #2840, Exhibit Hall, San Diego Conference Center

Evaluation of Patients with Suspected LRTI and/or Sepsis: The Utilization of Procalcitonin and Other Biomarkers in the Emergency Department

Speaker: Sean-Xavier Neath, MD, PhD
The care of the severely ill patient

with suspected lower respiratory tract infection (LRTI) requires the simultaneous integration of numerous assessment and treatment modalities by the emergency physician. Assessment of bacterial burden has not historically had diagnostic tests that delivered actionable results to first-line providers. In this talk, advances in diagnostic technology that benefit the emergency department will be explored. Procalcitonin is one tool that provides valuable information that complements and enhances the picture provided by previously existing tests.

GENENTECH

Tuesday, 2:30-3:15 p.m.
Product Showcase 1, Near Booth #2605, Exhibit Hall, San Diego Conference Center

Assessing Disability in Acute Ischemic Stroke: Beyond Just the NIHSS

Speaker: Alkesh Brahmabhatt, DO

Join us to learn from fellow colleague and ACEP member Dr. Brahmabhatt about assessing disability in acute ischemic stroke beyond just the National Institutes of Health Stroke Scale (NIHSS).

- Discern what is and is not assessed by the NIHSS.
- Understand why low NIHSS scores do not always equate to an absence of disability.
- Recognize how acute deficits can relate to long-term disability.
- Identify deficits that the American Heart Association/American Stroke Association consider disabling.

Stroke affects 795,000 people per year in the United States and is the fifth leading cause of death and the leading cause of serious long-term disability. Stroke can be overwhelmingly burdensome to caregivers, who are many times a family member, friend, neighbor and/or a health care professional. Join us to learn how to better individualize assessments for stroke-related disability in the acute phase to help improve patient outcomes. +



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MONDAY DAILY CORRECTIONS

- The grantors for the Monday Satellite Symposium “The Metabolic Crisis: Meeting the Challenge and Winning!” were Recordati Rare Diseases and Horizon Pharma.
- The education award won by Corey M. Slovis, MD, FACEP, is titled the Judith E. Tintinalli Award for Outstanding Contribution in Education.



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