Get Involved in Health Policy or Get Left Behind

WASHINGTON, D.C.—Emergency physicians who think that health policy is only an issue for elected leaders or the C-suite, really don’t have that luxury anymore. The money to fund health care is simply too tied to policy reform, said Randy Pilgrim, MD, FACEP, at this year’s Colin C. Rorrie, Jr. Lecture.

“There are many of us in this room that work in academic or employed facilities where you don’t have visibility or you have a layer of insulation between you and that reality,” said Dr. Pilgrim, enterprise chief medical officer for Schumacher Clinical Partners of Lafayette, Louisiana. “It’s my opinion that layer of insulation is going away very quickly. And hospitals under duress themselves are going to start dissecting and looking: Where are my costs? Where’s my revenue?”

by RICHARD QUINN

CONTINUED on page 3

VR, Wellness, and Quick Tips for Patient Care Top Draws

WASHINGTON, D.C.—The irony of virtual reality is that it’s better tested hands-on. Timothy Koboldt, MD, FACEP, simulation director for the emergency medicine residency at the University of Missouri, learned that firsthand as he toured innovatED wearing augmented-reality devices that he could potentially use to train his residents back home.

“I spend all this time doing all these very complicated cases and all this prep work,” Dr. Koboldt said. “And then I just drop them in [a video] game scenario and they’re like, ‘Oh yeah, that’s one of the best things we’ve done.’ So if I can have something that can keep their interest — and recreate patient-based experiences, it would be great.

“I’ve spent most of the time in here looking at the new technology coming out,” he said. “It’s great to see the future.”

ACEP’s annual meeting is, first and foremost, a scientific assembly. But for this year’s attendees, the lure of networking, the Wellness Center, innovatED, and a warehouse-sized Exhibit Hall is a really close second.

Alon Dagan, MD, an attending emergency physician at Beth Israel Deaconess Medical Center in Boston, said he appreciated the array of digital health companies that competed for funding.

“I spend all this time doing all these very complicated cases and all this prep work,” Dr. Koboldt said. “And then I just drop them in [a video] game scenario and they’re like, ‘Oh yeah, that’s one of the best things we’ve done.’ So if I can have something that can keep their interest and recreate patient-based experiences, it would be great.

“I’ve spent most of the time in here looking at the new technology coming out,” he said. “It’s great to see the future.”

ACEP’s annual meeting is, first and foremost, a scientific assembly. But for this year’s attendees, the lure of networking, the Wellness Center, innovatED, and a warehouse-sized Exhibit Hall is a really close second.

Alon Dagan, MD, an attending emergency physician at Beth Israel Deaconess Medical Center in Boston, said he appreciated the array of digital health companies that competed for funding.

“Funding is key,” he said. “If you make something and you can’t get it funded, you can’t use it.”
MISS A SESSION? CATCH UP WITH VIRTUAL ACEP17

Too many great sessions to attend? Or maybe you will want to revisit a course you attended? Virtual ACEP17 is the perfect complement to your ACEP17 experience. Through our new virtual platform, you will have 24-7 access to all the ACEP17 presentations.

Virtual ACEP17 includes access to the slides and audio from all the courses presented during the conference—our new integrated classroom brings everything together in a single, unified view.

- Contextual notes are tied to the replay of the session slide by slide.
- Play back at different speeds to slow down or speed up your experience.
- Discuss and comment with your peers on specific slides right from the online player.
- Create a playback list of your favorite sessions to watch now or later.

Online access begins 24 hours after the conference ends and CME credits are available.

Special discount pricing is available only during the conference. Visit one of the three demonstration areas to purchase.

ACEP17 Attendee Pricing
- Member: $259
- Nonmember: $359
- International: $199

Virtual ACEP17 includes:
- All of the courses presented during the 3 ½-day conference
- Secure online access from any standard browser
- Streaming content for viewing on iPad, iPhone, or Android devices
- Downloadable MP3 files for convenient on-the-go audio.
- Activity approved for AMA PRA Category 1 Credit(s).

Teleconference Highlights Opioid Research

ACEP President Dr. Paul Kivela (left), along with Dr. Scott Weiner and Dr. Krista Brucker fielded questions Monday during a teleconference at ACEP17. They presented the findings of two Research Forum studies that detail the intractability of opiate dependency, including among patients who are successfully rescued from overdose by naloxone, and offer insight into who is more likely to become opiate dependent. Read more at newsroom.acep.org.
Manage Pain Without Opioids
by ART HSIEH

WASHINGTON, D.C.—Occupational strains and sprains are common presentations to the emergency physician. At the same time, there is significant attention being paid to the use and overuse of opioid medications in the management of pain. No wonder: Studies show that patients with occupational lower back pain who are prescribed opioids early are more likely to receive MRIs, more likely to have surgery, more likely to be disabled one year after incident. Moreover, more than 6 percent will qualify as “art.”

One approach is to layer several non-opioid pain medications. Begin with tried and true NSAIDS. Studies show that naproxen alone achieves the same level of pain control when compared to combinations of naproxen and oxycodone or flexeril. Moreover, a 400-mg dose is thought to be ideal, as the analgesic ceiling is reached at that range. If that doesn’t achieve the desired response, consider adding acetaminophen. The combination of the two

has been shown to achieve better control of postoperative and dental pain than either one alone. Another layer of medication to add are topicals. Lidocaine patches or diclofenac gel or patches have been shown to be effective at controlling localized muscular pain.

Osteopathic manipulative therapy (OMT) is another approach to consider. This technique stretches and realigns muscles and tendons and takes advantage of the body’s natural ability to heal. In one study, OMT was shown to achieve similar results in pain control when compared to intramuscular ketorolac. Any medical or osteopathic physician can perform these procedures, they take little time to perform, and are reimbursable with appropriate documentation.

For focal nodular spasms, trigger point injections can be successfully used to release the tension and reduce the pain. The nodule is isolated during assessment, and a 21 to 25 g needle with a local anesthetic is introduced at a 30-degree angle into the center of the nodule. The needle is then partially withdrawn and reinserted several times at different angles, breaking up the fibers and releasing the tension. This procedure is reimbursable as well and has produced remarkable results in diminishing severe pain quickly.  

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

START PLANNING FOR ACEP18 IN SAN DIEGO

by DAWN ANTOLINE-WANG

C elebrating ACEP’s 50th anniversary is just one of the many reasons to attend ACEP18, which will take place in San Diego, California, Oct. 1–Oct. 4, 2018. Take this opportunity to relax, enjoy the sun and surf, experience the sights, and check out the shopping and dining scene in this world-class city.

Good Eats

- **Bom &Raised:** The place to go if you’re in the mood for a classy steak dinner and beautifully crafted cocktails.
- **Casa Guadalajara:** Located in Old Town, this colorful restaurant offers authentic Mexican food and mariachis.
- **The Fishery:** Run by a commercial fisherman, this top-notch seafood restaurant also has a seafood market.
- **Hobdog:** Called the best burger joint in San Diego, this neighborhood spot has been featured on “Diners, Drive-ins and Dives.”
- **Lionfish:** Located in the Pendry San Diego hotel, this restaurant offers a seasonally-driven menu designed for sharing.

Arts and Culture

- **Theater:** San Diego offers more than 150 stage options to suit every taste—musicals to dramas, small avant-garde shows to large and award-winning productions. Half-price tickets to many shows are available at the ARTS TIX box office in Horton Plaza.
- **Education on the Water:** The USS Midway Museum—one of the top museums in the country according to Trip Advisor—and the Floating Maritime Museum of San Diego offer visitors a chance to explore floating vessels both old and new.
- **Music:** From the San Diego Symphony in the historic Copley Symphony Hall, to the underground music scene at The Casbah, Soda Bar, and SPACE, San Diego has something for every music lover.
- **Art:** The San Diego Museum of Art in Balboa Park and the Museum of Contemporary Art San Diego offer visitors a classic museum experience with thousands of works to see, but be sure to check out the smaller art spaces such as Space X Art, Thumprint Gallery, or the Lux Art Institute for unique takes on the process of creation and what qualifies as “art.”

See the Sights

- **Balboa Park:** Home to the San Diego Zoo and dozens of museums, performing art venues, and other attractions, this historic park offers something for everyone.
- **Coronado Island:** Hop a ferry at Broadway Pier or the Convention Center to this beautiful island off the coast of San Diego to enjoy cycling, beaches, golf, and water sports.
- **Gaslamp Quarter:** Stroll through the historic heart of San Diego right next to the convention center to take in the Victorian architecture, grab a bite, or party at one of the neighborhood’s night clubs.
- **Sunset Cliffs Natural Park:** This 68-acre park runs along the Pacific Ocean and offers unparalleled sunset views in the evening.
- **Whale or Dolphin Watching Tours:** Take a boat tour for a chance to spot dolphins, gray whales, humpback whales, and more.

DAWN ANTOLINE-WANG is editor of ACEP Now.
The Latest Information on Diagnosing and Treating Headache

by RICHARD QUINN

It only takes one subarachnoid hemorrhage misdiagnosed as a headache to cause a nightmare for an emergency physician. That is one reason Matthew Siket, MD, FACEP, is presenting “Stop the Pounding: Update on Headache Assessment and Treatment” today.

“Most of the time when we see a headache, it’s going to be a benign cause,” said Dr. Siket, co-director of the emergency center stroke centers at Rhode Island and The Miriam hospitals in Providence. “Every once in a while, we’re going to run into a really dangerous cause. And we need to be prepared for when that comes so that we don’t miss it.”

Dr. Siket will talk about current guidelines for acute migraine treatment, management of headache syndromes, and inappropriate imaging. The last topic is part of a national discussion of decreasing imaging utilization for benign headaches. “The problem for us is that we’re in a catch 22 because we don’t know that the headache is benign until we’ve done our workup,” Dr. Siket said.

“Every once in a while, we’re going to run into a really dangerous cause. And we need to be prepared for when that comes.”

—Dr. Siket

The session will give attendees an opportunity to hear the latest research from the emergency medicine and neurology literature, Dr. Siket said. “What have we learned from research in terms of predictors of badness and what does the data tell us are real clinical predictors of the dangerous causes?” he said. “What do we make of the thunderclap headache? What do we do when this is an abrupt and severe headache rather than sort of a gradually worsening headache?”

RICHARD QUINN is a freelance writer in New Jersey.

Becoming an Expert at Identifying and Treating Rash

by KAREN APPOLD

As the first line of care for patients who need urgent help, emergency physicians should be able to diagnose and manage rashes, said Catherine Marco, MD, FACEP, professor of emergency medicine and surgery at Wright State University in Dayton, Ohio.

“Patients with a rash come to the emergency department to get immediate answers and treatment because dermatologists and primary care physicians aren’t available 24/7,” she said. “We should be able to identify dermatologic emergencies just as quickly and accurately as these other physicians.”

“We should be able to identify dermatologic emergencies just as quickly and accurately as these other physicians.”

—Dr. Marco

During her presentation, “Recognizing the Top Ten Pediatric and Adult Rashes,” Dr. Marco will interact with audience members to identify important adult rashes and to significant pediatric rashes. “We will approach each case like solving a mystery,” she said. “We should be able to identify dermatologic emergencies just as quickly and accurately as these other physicians.”

During her presentation, “Recognizing the Top Ten Pediatric and Adult Rashes,” Dr. Marco will interact with audience members to identify important adult rashes and to significant pediatric rashes. “We will approach each case like solving a mystery,” she said. “We should be able to identify dermatologic emergencies just as quickly and accurately as these other physicians.”

“Recognizing the Top Ten Pediatric and Adult Rashes”

Tuesday, Oct. 31
9:30–10:30 a.m.
WCC, Room 151A

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

Bust These Imaging Myths

by RICHARD QUINN

Joshua Broder, MD, FACEP, understands that undoing myths—particularly those tied to diagnostic imaging—is a difficult practice. But it still needs to be done.

“It’s really intolerable in a scientific age for us to rely on information simply because someone told us to in the past,” said Dr. Broder, director of the emergency medicine residency program at Duke University School of Medicine in Durham, North Carolina. “It’s one of the challenges of translating medical knowledge into a practice.”

Hence, Dr. Broder is presenting “Ten Fatal Imaging Myths That Should Change Your Practice.” The session aims to teach attendees to avoid myths and misconceptions that could result in delays or, at worst, potentially fatal misdiagnoses.

“One is that ultrasound can rule out ovarian torsion,” Dr. Broder said. “We use the ultrasound to look at the blood supply and confirm whether it’s normal or not normal. And we’ve come to think it’s a yes-no test. It should answer the question. But it’s actually a very poorly studied topic, and a patient’s fertility is on the line if we don’t make the diagnosis in a timely fashion.”

“We use the ultrasound to look at the blood supply and confirm whether it’s normal or not normal. And we’ve come to think it’s a yes-no test.”

—Dr. Broder

Other examples of imaging myths are that certain contrast agents are needed in CT scans when they’re not or that intravenous contrast can result in kidney failure in higher-risk patients, Dr. Broder said. The session’s goal is to change those habits.

“I hope that they go back to their very next shift and be able to change the way they image a common condition,” Dr. Broder said.

RICHARD QUINN is a freelance writer in New Jersey.

Get the Latest Update on Atrial Fibrillation

by KAREN APPOLD

In the past decade, emergency department visits directly due to atrial fibrillation have increased by more than 33 percent. Given this, Corey M. Slovis, MD, FACEP, professor and chairman of the department of emergency medicine at Vanderbilt University Medical Center in Nashville, said emergency physicians need to be experts in managing it. That will be the focus of his talk, “Atrial Fibrillation Update 2017: Don’t Miss a Beat.”

Specifically, emergency physicians should know that newer oral anticoagulants are now available; vitamin K antagonists are no longer the only drugs to treat it. “Newer medications have dramatically changed how we discharge patients on anticoagulation medication,” he said.

“Newer medications have dramatically changed how we discharge patients on anticoagulation medication.”

—Dr. Slovis

Dr. Slovis said emergency physicians in the past often deferred the decision to anticoagulate to the patient’s cardiologist. “But it may take weeks or months to become anticoagulated, leaving them at great risk of having a stroke,” he said. “Therefore, as emergency physicians, we need to know who to anticoagulate, how to anticoagulate, and when they need follow-up.”

Another key message is to treat the underlying disease causing a rapid ventricular response, not the arrhythmia. “Treat the disease in order to make the atrial fibrillation better or cure it,” he said.

Dr. Slovis will base his talk on findings from the 2014, Atrial Fibrillation Guideline from the American College of Cardiology. He has spent considerable time diagnosing, treating, and teaching about cardiovascular emergencies.

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

STOP THE POUNDING: UPDATE ON HEADACHE ASSESSMENT AND TREATMENT

Tuesday, Oct. 31
9–9:25 a.m.
WCC, Room 146B

RECOGNIZING THE TOP TEN PEDIATRIC AND ADULT RASHES

Tuesday, Oct. 31
9–9:50 a.m.
WCC, Room 151A

TEN FATAL IMAGING MYTHS THAT SHOULD CHANGE YOUR PRACTICE

Tuesday, Oct. 31
12:30–1:20 p.m.
WCC, Room 147A

ATRIAL FIBRILLATION UPDATE 2017: DON’T MISS A BEAT

Tuesday, Oct. 31
1:30–1:55 p.m.
WCC, Room 146B
The diagnosis...
**Hot Sessions**

**Be Ready to Manage Any Type of Wound**  
by KAREN APPOLD

Emergency physicians encounter wounds every day. “Repairing lacerations is risky, but we need to perform these procedures with expert quality in a timely fashion,” said Christopher B. Colwell, MD, FACEP, chief of emergency medicine at Zuckerberg San Francisco General Hospital and Trauma Center. He noted that about 25 percent of lawsuits nationwide against emergency physicians involve wound care.

“Every area of the body requires a different approach and has different risks associated with it. I’ll discuss different wounds and how to manage each one given its location.”

—Dr. Colwell

In his presentation, “Advanced Wound Closure in the ED: Putting the Pieces Back Together,” Dr. Colwell will discuss closing techniques that some may not be familiar with and will also address cosmetic aspects of closing wounds. “Every area of the body requires a different approach and has different risks associated with it,” Dr. Colwell said. “I’ll discuss different wounds and how to manage each one given its location.”

His comprehensive overview will also shed light on how to prevent infections, handle complications, and avoid risks, as well as when to consult a specialist. Videos showing more complicated closures will be shown.

The goal is to become more comfortable in handling these high-volume procedures. “It’s a critical topic, as we all deal with wound care no matter where we’re located or what type of facility we work at,” Dr. Colwell said.

**A Focus on Better Care for Ophthalmic Emergencies**  
by VANESSA CACERES

Patients with eye complaints frequently present to the emergency department, and their conditions can have serious consequences, including loss of vision. In today’s “Essential Ophthalmologic Procedures and Examinations” session, Jason R. Knight, MD, FACEP, medical director of Houston Methodist The Woodlands Hospital in Houston, will review essential ophthalmologic procedures in emergency medicine practice.

“It’s a good session to attend and review an entire semester of ophthalmology compressed down into a rapid-fire 50-minute interactive lecture,” Dr. Knight said.

Because ophthalmology is typically a business-hours-focused practice—and many practices don’t even accept calls after-hours—it’s even more crucial for emergency physicians to know how to handle ophthalmic emergencies. Missing critical findings can have devastating consequences for patients, such as in the case of strokes that can present with eye findings, Dr. Knight said.

“It’s a good session to attend and review an entire semester of ophthalmology compressed down into a rapid-fire 50-minute interactive lecture.”

—Dr. Knight

His presentation will focus on a range of ophthalmologic tips for diagnosis and management, including slit-lamp examination, foreign body removal, fundus examination, pupil dilation, ultrasound use, and afferent pupillary defects.

His session also will go over the range of ophthalmologic tips for diagnosis and management, including slit-lamp examination, foreign body removal, fundus examination, pupil dilation, ultrasound use, and afferent pupillary defects.

**Last Day to Visit Exhibit Hall**

The Exhibit Hall, including innovatED, the ACEP Resource Center, and much more, is open only until 3:30 p.m. today. Don’t miss your chance to stop by!

**Annals of Emergency Medicine**

Find answers from the leading emergency medicine peer-reviewed journal in the ACEP Resource Center during Exhibit Hall hours. 

“Annals” podcast editor, Rory Spiegel, MD, will be doing interviews from 10 to 11 a.m. today.

**Resource Center Prizes**

Stop by the ACEP Resource Center today for your chance to win fabulous prizes! ACEP is giving away the best emergency medicine education, provided by ACEP eCME, Critical Decisions, and PEER. You could win one of nine ACEP educational product subscriptions.

**Caught the Advocacy Bug? Don’t Miss the ACEP Leadership & Advocacy Conference!**

Being in the Capital City has probably got you thinking about what you can do to affect the future of emergency medicine at the state and federal levels. Did you know ACEP has a conference just for advocacy? Join us at LAC8, May 20–22, 2018, in Washington, D.C. You’ll have a small-conference experience with large-conference impact.

- Learn about advocacy issues affecting emergency medicine.
- Establish an action plan for your state and federal legislators.
- Enjoy truly unique networking opportunities with like-minded colleagues.

Learn more and register now at acep.org/LAC8.

**ACEPNow**

is a KEY resource in Emergency Medicine

Visit Wiley at Booth #914

Draw the key that unlocks the box to win an Amazon Gift Card!
YOUR NEXT PATIENT EXPOSED TO SMOKE MAY HAVE CYANIDE POISONING

Visit CYANIDEINSIGHT.COM to learn the causes, signs, and symptoms of cyanide poisoning.
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 ACEP17 education program as planned by ACEP’s Educational Meetings Committee.

The Multi-disciplinary PERT: A New Standard of Care for Acute Pulmonary Embolism
Tuesday, 6–8 a.m.
Registration, breakfast, and program Marriott Marquis/Marquis Ballroom, Salon 4

Pulmonary embolism (PE) is a life-threatening condition that affects people of all ages and health statuses, from the most fit athletes to the most infirm patients. Detection of PE, “the great masquerader,” is challenging because its signs and symptoms are often subtle and mimic those of other disease states. Once PE is diagnosed, clinicians have little guidance in choosing from the wide array of therapies available because:
• No accepted algorithm exists to guide diagnostic and therapeutic decision making.
• Outcomes data and evaluation for available therapies are lacking.
• Care rendered to PE patients is fragmented among different clinical services.
• Assessment of bleeding and other risks remains daunting.

Long-term effects of PE are poorly understood, though they can be severely debilitating. In the face of these challenges, multidisciplinary rapid-response programs—pulmonary embolism response teams, or PERTs—have been established at many institutions across the United States and abroad. PERTs promote coordination among specialists who care for PE patients. The PERT initiative has gained significant traction, leading to the establishment of a 501(c)(3) not-for-profit organization dedicated to improving outcomes for PE through collaboration in research, educational programs, management protocols, and dissemination of information about PE among member institutions, as well as increasing public awareness of PE and its prevention. PERT programs hold the promise to improve interdisciplinary communication and collaboration, facilitate timely decision making to enhance care, and enable systematic collection and evaluation of data related to PE treatment and outcomes.

The goals of this satellite symposium are to improve PE diagnosis, care coordination, and treatment while expanding knowledge of the underlying mechanisms and long-term follow-up strategies for patients with PE. In addition, the patient perspective will be presented.
Sponsor: National PERT Consortium, Inc.
Grantor: Janssen Pharmaceuticals, Inc.

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

THIS YEAR’S ELECTRONIC SHOWCASE is larger than ever and has been integrated throughout ACEP17:
• Research Forum abstracts will be available to view near the course rooms and arranged by subject 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.
• Learn from a panel of experts during “Prime-Time Practice Changers: Highlights of the Research Forum” on Tuesday.

Sponsored by GE Healthcare

Q: WHAT IS THE VALUE OF ACEP17 TO YOU?

“When you come to these national meetings and hear these speakers speak, you’re able to gather a lot of knowledge from them, you’re able to stalk them after the presentations and ask a couple of questions as well, just to advance your knowledge base and make sure you feel ready when you graduate residency.”

-Ameera Haamid, MD, emergency medicine resident, Cook County Health & Hospitals System, Chicago
Improve Quality with CEDR and E-QUAL

CEDR
As part of its ongoing commitment to provide the highest quality of emergency care, ACEP has developed the CEDR. This 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 over the coming years. The ACEP CEDR has been approved by Centers for Medicare and Medicaid Services (CMS) as a qualified clinical data registry. The CEDR will provide a unified method for ACEP members to collect and submit Physician Quality Reporting System data, maintenance of certification, ongoing professional practice evaluation and other local and national quality initiatives. Visit us to get more information, watch demonstrations, and sign up.

Tuesday, 7:30 a.m.–5:30 p.m.
Walter E. Washington Convention Center, Level 1, West Salon Foyer

E-QUAL
The ACEP Emergency Quality Network (E-QUAL) is a CMS-supported Support and Alignment Network of the Transforming Clinical Practice Initiative. E-QUAL has been designed to engage emergency clinicians and leverage emergency departments to improve clinical outcomes and coordination of care and to reduce costs within three areas of focus:

- Improve outcomes for sepsis.
- Reduce avoidable imaging in low-risk patients through implementation of with ACEP’s Choosing Wisely program.
- Improve value of ED chest pain evaluation by reducing avoidable admissions in low-risk patients with chest pain.

Participation in E-QUAL will demonstrate the value and importance of EM care in addition to clinicians earning improvement activity credit for the new merit-based incentive payment system program, MOC Part IV credit, access to free eCME, and more resources and guidelines in the E-QUAL toolkits.

Tuesday, 7:30 a.m.–5:30 p.m.
Walter E. Washington Convention Center, Level 1, West Salon Foyer

Q: WHAT IS THE VALUE OF ACEP17 TO YOU?

“Education gets summarized here in a way that makes it more efficient. It’s nice to have other people go in-depth in a lot of different areas.”

-Joseph Alfano, MD, emergency physician, Fairview Lakes Medical Center, Wyoming, Minnesota
The diagnosis and management of concussion continues to be an evolving and controversial subject in 2017, according to Andrew D. Perron, MD, FACEP, residency program director and emergency physician at the Maine Medical Center in Portland. While there is a growing body of evidence to support treatment guidelines, there continues to be conflicting information in key areas.

Concussion is a complex problem that is not well understood. Although there is currently a lot of attention focused on chronic traumatic encephalopathy (CTE), Dr. Perron stresses that the relationship between the two is not linear. Current literature supports a cascading model of events that occur within the brain after blunt trauma, including a decrease in blood flow to the injured area; cerebrovascular autodysregulation; tissue ischemia and edema; release of excitatory neurotransmitters such as acetylcholine, glutamate, aspartate; and the generation of free radicals.

Brains are individual and dynamic, and there is little predictability to the sequence and severity of signs and symptoms post injury, according to Dr. Perron. There are confounding factors that may need to be taken into account, including sleep deprivation, dehydration, and fatigue. In general, it appears that 90 percent of high school athletes with a sports-related concussion will be symptom free and can return to play within one month. Risk factors for longer recovery include multiple prior concussions, history of migraines and/or learning disabilities, and degree and severity of symptoms after concussion. Female sex may also play a role.

Dr. Perron stresses the need to use standardized tools during a sideline assessment of a player. “We are not good at just going to talk to [a player] and finding out what we need to know to decide whether they have a concussion or not,” he said. While not perfect, checklists such as SCAT3, Child-SCAT3 and the Concussion Recognition Tool make concussion assessment more consistent. Anterograde and retrograde amnesia seem to be critical markers of concussion.

Players who exhibit signs of concussion are removed from play immediately, and do not return to play on the same day. In all 50 states, there are laws in place that support this practice. Post-concussion rest is another area of controversy. Recent studies indicate that the brain may benefit from a more active, rather than less. This evolution in thought is similar to other injury patterns such as back pain, psychiatric illness, and stroke, where prolonged rest has been shown to be detrimental. As Dr. Perron indicates, “At this point, we simply don’t know for sure if rest is helpful to the recovery process.”

There is also no method identified at this point that can speed up the recovery process. Players should not be cleared to return to play until symptoms during activity resolve. While neurocognitive testing is not an exact science, players should return to their baseline testing results prior to clearance.

**Concussion Management for Young Athletes**

by ART HSIEH

WASHINGTON, D.C.—The diagnosis and management of concussion continues to be an evolving and controversial subject in 2017, according to Andrew D. Perron, MD, FACEP, residency program director and emergency physician at the Maine Medical Center in Portland. While there is a growing body of evidence to support treatment guidelines, there continues to be conflicting information in key areas.

Concussion is a complex problem that is not well understood. Although there is currently a lot of attention focused on chronic traumatic encephalopathy (CTE), Dr. Perron stresses that the relationship between the two is not linear. Current literature supports a cascading model of events that occur within the brain after blunt trauma, including a decrease in blood flow to the injured area; cerebrovascular autodysregulation; tissue ischemia and edema; release of excitatory neurotransmitters such as acetylcholine, glutamate, aspartate; and the generation of free radicals.

Brains are individual and dynamic, and there is little predictability to the sequence and severity of signs and symptoms post injury, according to Dr. Perron. There are confounding factors that may need to be taken into account, including sleep deprivation, dehydration, and fatigue. In general, it appears that 90 percent of high school athletes with a sports-related concussion will be symptom free and can return to play within one month. Risk factors for longer recovery include multiple prior concussions, history of migraines and/or learning disabilities, and degree and severity of symptoms after concussion. Female sex may also play a role.

Dr. Perron stresses the need to use standardized tools during a sideline assessment of a player. “We are not good at just going to talk to [a player] and finding out what we need to know to decide whether they have a concussion or not,” he said. While not perfect, checklists such as SCAT3, Child-SCAT3 and the Concussion Recognition Tool make concussion assessment more consistent. Anterograde and retrograde amnesia seem to be critical markers of concussion.

Players who exhibit signs of concussion are removed from play immediately, and do not return to play on the same day. In all 50 states, there are laws in place that support this practice. Post-concussion rest is another area of controversy. Recent studies indicate that the brain may benefit from a more active, rather than less. This evolution in thought is similar to other injury patterns such as back pain, psychiatric illness, and stroke, where prolonged rest has been shown to be detrimental. As Dr. Perron indicates, “At this point, we simply don’t know for sure if rest is helpful to the recovery process.”

There is also no method identified at this point that can speed up the recovery process. Players should not be cleared to return to play until symptoms during activity resolve. While neurocognitive testing is not an exact science, players should return to their baseline testing results prior to clearance.

**ART HSIEH** is a paramedic, educator, and writer based in Northern California.
Washington, D.C.—Most sore throats are minor in nature and physicians often refer them to fast track or even try to take care of them quickly, according to Tracy G. Sanson, MD, FACEP, associate professor of emergency medicine at the University of Central Florida College of Medicine in Orlando and Team Health’s division of medical leadership education and professional liaison. However, there are several presentations that merit rapid identification and intervention because of their potential severity.

Illnesses such as diphtheria and botulism are on the rise. Patients appear toxic, are lethargic, and, more ominously, whisper rather than talk. In diphtheria, a gray membrane covers the tonsils and throat. Both require the appropriate antitoxin for definitive treatment.

Threats to airway patency, such as Ludwig’s angina and epiglottitis, may require nasal or oral intubation in the awake patient. Dr. Sanson offers a few tips in preparing the airway, including coating the laryngoscope with viscous lidocaine, nebulizing lidocaine, or combining lidocaine with Neo-Synephrine and spraying it in the nare. Follow the lidocaine with a size 32 nasal trumpet, allowing it to stay in place while vasoconstriction and anesthesia takes place.

Accidentally puncturing the carotid artery while draining peritonsillar abscesses can be avoided by cutting off part of the needle guard of the syringe so that only enough of the needle is exposed to puncture the tissue at the correct depth. Alternatively, insert the needle through the center of a blood tube cap to limit the length of the needle. A spinal needle can also be used, and has the advantage of keeping the fingers outside of the mouth. If an incision is warranted, wrapping the blade with tape and exposing only the length necessary to lance an abscess provides a safeguard.

During these procedures, allowing patients to handle their own suction catheter can be more effective in minimizing secretions going down the throat and keeps the physician’s hands available. The patient can also hold a laryngoscope or LED speculum to provide illumination during the procedure, and keep the tongue out of the way.

Dr. Sanson suggests getting comfortable with ultrasound, as it can be a key tool in differentiating an abscess from early cellulitis. Performing the ultrasound at bedside may help avoid a costly trip to the CT room.

Managing post tonsillectomy hemorrhage can be challenging. Sometimes the often-used techniques of direct pressure, epinephrine/lidocaine injection, or tea bag placement do not work. Soaking a pledget with tranexamic acid (TXA) may be useful in these situations. Alternatively, crush two TXA tablets with a couple of milliliters of fluid to create a paste and insert the paste into the socket. This technique has the added benefit of being significantly less expensive.

A bleeding tracheostomy is another airway challenge. Make sure that the trach balloon is fully inflated. Compress the innominate artery by pressing against the sternal notch. If this does not work, replace the trach with a cuffed endotracheal tube. The endotracheal cuff may need to be slowly inflated much more than normal, upwards of 30 to 50 cc of air. If the innominate fistula breaks loose, remove the trach, insert a finger into the opening, and compress the artery between the finger and the externally placed thumb. Take a ride with the patient on the gurney to the operating room.

Quick Tips for ENT Emergencies

by Art Hsieh

Washington, D.C.—Most sore throats are minor in nature and physicians often refer them to fast track or even try to take care of them quickly, according to Tracy G. Sanson, MD, FACEP, associate professor of emergency medicine at the University of Central Florida College of Medicine in Orlando and Team Health’s division of medical leadership education and professional liaison. However, there are several presentations that merit rapid identification and intervention because of their potential severity.

Illnesses such as diphtheria and botulism are on the rise. Patients appear toxic, are lethargic, and, more ominously, whisper rather than talk. In diphtheria, a gray membrane covers the tonsils and throat. Both require the appropriate antitoxin for definitive treatment.

Threats to airway patency, such as Ludwig’s angina and epiglottitis, may require nasal or oral intubation in the awake patient. Dr. Sanson offers a few tips in preparing the airway, including coating the laryngoscope with viscous lidocaine, nebulizing lidocaine, or combining lidocaine with Neo-Synephrine and spraying it in the nare. Follow the lidocaine with a size 32 nasal trumpet, allowing it to stay in place while vasoconstriction and anesthesia takes place.

Accidentally puncturing the carotid artery while draining peritonsillar abscesses can be avoided by cutting off part of the needle guard of the syringe so that only enough of the needle is exposed to puncture the tissue at the correct depth. Alternatively, insert the needle through the center of a blood tube cap to limit the length of the needle. A spinal needle can also be used, and has the advantage of keeping the fingers outside of the mouth. If an incision is warranted, wrapping the blade with tape and exposing only the length necessary to lance an abscess provides a safeguard.

During these procedures, allowing patients to handle their own suction catheter can be more effective in minimizing secretions going down the throat and keeps the physician’s hands available. The patient can also hold a laryngoscope or LED speculum to provide illumination during the procedure, and keep the tongue out of the way.

Dr. Sanson suggests getting comfortable with ultrasound, as it can be a key tool in differentiating an abscess from early cellulitis. Performing the ultrasound at bedside may help avoid a costly trip to the CT room.

Managing post tonsillectomy hemorrhage can be challenging. Sometimes the often-used techniques of direct pressure, epinephrine/lidocaine injection, or tea bag placement do not work. Soaking a pledget with tranexamic acid (TXA) may be useful in these situations. Alternatively, crush two TXA tablets with a couple of milliliters of fluid to create a paste and insert the paste into the socket. This technique has the added benefit of being significantly less expensive.

A bleeding tracheostomy is another airway challenge. Make sure that the trach balloon is fully inflated. Compress the innominate artery by pressing against the sternal notch. If this does not work, replace the trach with a cuffed endotracheal tube. The endotracheal cuff may need to be slowly inflated much more than normal, upwards of 30 to 50 cc of air. If the innominate fistula breaks loose, remove the trach, insert a finger into the opening, and compress the artery between the finger and the externally placed thumb. Take a ride with the patient on the gurney to the operating room.

Art Hsieh is a paramedic, educator, and writer based in Northern California.
innovatED offers an unprecedented look at new technology, products, and services available to emergency practitioners. Don’t miss these exciting events.

**TUESDAY**

**In With the Old: Innovations in Palliative and Geriatric ED Care**

*11–11:30 a.m.*

Location: Palliative and Geriatric Care Area

Sponsored by VITAS Healthcare, The John A. Hartford Foundation, and West Health Institute

**The mHealth Toolbox Workshop**

*11 a.m.–12:15 p.m.*

Location: mHealth Toolbox Area

Sponsored by mHealth Toolbox

**The Hospital Visit**

*11:15–11:25 a.m.*

Location: Innovation Spotlight Theater

Presented by Jay Kaplan, MD, FACEP, Past President, ACEP

Sponsored by Steelcase Health

**How Technology Can Improve Timely and Seamless Care Transitions to Hospice in Your ED**

*11:45–11:51 a.m.*

Location: Innovation Spotlight Theater

Presented by Eric Shaban, MD, regional medical director, VITAS Healthcare

Sponsored by VITAS Healthcare

**Interactive Discussion: Innovations to Improve Behavioral Health Throughput and Safety**

*Noon–12:30 p.m.*

Location: Behavioral and Psychiatric Emergencies Area

Presented by Jonathan Merson, MD, associate vice president, behavioral health service line, and medical director, Center for Emergency Medical Services, Northwell Health

Sponsored by Foundation for Advancing Alcohol Responsibility and Ad- vanced Recovery Systems

**Digital Health Pitch Event**

*Noon–12:30 p.m.*

Location: Innovation Spotlight Theater

Featuring four incubatED participants: EvidenceCare; FOAMbase, LLC; HealtheMedRecord, LLC; and MedCognition, Inc.

**Simulation: Triaging Behavioral Health Patients Utilizing a Five-Level Scale**

*2:30–3 p.m.*

Location: Behavioral and Psychiatric Emergencies Area

Presented by Michael Guttenberg, DO; Jonathan Merson MD; Kate B. O’Neill RN MSN; Michael Gerardi, MD, FAAP, FACEP, chair, Coalition on Psychiatric Emergencies; and Maria Margaglione, actress, Coalition on Psychiatric Emergencies, web and visual communications director, Depression and Bipolar Support Alliance

Sponsored by Foundation for Advancing Alcohol Responsibility and Ad- vanced Recovery Systems

**In With the Old: Innovations in Palliative and Geriatric ED Care**

*3–3:30 p.m.*

Location: Palliative and Geriatric Care Area

Sponsored by VITAS Healthcare, The John A. Hartford Foundation, and West Health Institute

---

**PRODUC**

**TUESDAY ISSUE**

**PRODUCT AND SERVICE SHOWCASES KEEP YOU UP TO SPEED**

Don’t miss the Product Showcase today 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 in the Exhibit Hall. Show up early—seating is limited to 150, and a boxed meal will be served at each event.

**TUESDAY**

**BMS/Pfizer Showcase**

**Treatment of VTE and Reduction in the Risk of Recurrent VTE Following Initial Therapy**

*11:30 a.m.–12:15 p.m.*

**Product Showcase I**

Speaker: Robert Dunne, MD

This session will preview clinical trial information that led to the U.S. Food and Drug Administration approval of Apixaban for the treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE) and risk of recurrent DVT/PE following initial therapy. Both AMPLIFY and AMPLIFY-Extend efficacy and safety data will be discussed, with time allocated throughout the presentation for questions.

**Portola Pharmaceuticals, Inc. Showcase**

**In-Hospital to Home: New Standards for Extended-Duration VTE Prophylaxis in Acutely Ill Medical Patients**

*11:30 a.m.–12:15 p.m.*

**Product Showcase II**

Speaker: Marc Cohen, MD, FACC

Please join us for a product showcase sponsored by Portola Pharmaceuticals. This program will review the burden of VTE in acutely ill medical patients, provide an overview of the unmet need for extended-duration VTE prophylaxis from in-hospital to home, and review the APEX clinical trial data.

**Janssen Pharmaceuticals Showcase**

**Clinical Data and Real-World Evidence to Support DVT/PE Treatment Decision Making**

*2:30–3:15 p.m.*

**Product Showcase II**

Speaker: James Miner, MD, and Pamela Palmer, MD, PhD

Establishing IV access in a busy emergency department can be challenging, time consuming, and resource intensive, especially when the patient has difficult IV access. When the patient is also suffering from moderate-to-severe acute pain, this delay in analgesic administration can cause significant anxiety and needless suffering. Our faculty will discuss a new approach to pain management that alleviates the challenges with IV access and potentially addresses unmet needs regarding management of acute pain in the emergency department setting. Safety and efficacy data from clinical trials, including patients presenting to the emergency department with moderate-to-severe acute pain, will be reviewed.

**Ace/RX Showcase**

**Frontline Therapy: A New Approach to ED Pain Management**

*2:30–3:15 p.m.*

**Product Showcase I**

Speakers: James Miner, MD, and Pamela Palmer, MD, PhD

This program will review the burden of VTE in acutely ill medical patients, and are required to present information in compliance with FDA requirements for communications about its medicines.

---

**WWW.ACEP.ORG/ACEP17**
TAKE ADVANTAGE OF THE NEMPAC DONOR LOUNGE

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 ACEP17 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 8 a.m.–4 p.m.
Washington Convention Center
(by invitation only)

ACEP members who have donated at the Give-a-Shift level in the past year are invited to stop by and relax in 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 on hand to discuss NEMPAC’s mission and activities.

Get Nostalgic, Get Ready for ACEP18 and ACEP’s 50th Anniversary!

2018 WILL MARK THE 50TH YEAR ACEP HAS BEEN IN OPERATION, which means we are celebrating 50 years of promoting the very best in the practice of emergency medicine nationwide.

Today is the perfect time to get ready for the amazing 50th anniversary year-round event, which will culminate at ACEP18 in San Diego, California.

Visit the “ACEP Then & Now: The 50-Year Journey of EM” exhibit in the Exhibit Hall (9:30 a.m.–3:30 p.m.) to kick back, relax, and see the journey so far before the big anniversary next year. Sit in a comfy chair and chat with old friends or make new ones. Take a selfie through the decades. Explore a 360-degree virtual reality tour of the new ACEP headquarters in Dallas. Reflect on our amazing 50-year history as a specialty and the role you’ve played in making ACEP great.

In celebration of our 50th anniversary in 2018, ACEP is creating an enduring book that captures the DNA of modern emergency medicine. This inspiring collection of photo essays by renowned photojournalist Eugene Richards will feature stirring images and first-person stories told by ACEP founders and new leaders, physicians, physicians assistants, nurses, and other allied health providers on the front lines. The book will make its debut at ACEP18, but a sneak peek at the photos is available in the “ACEP Then & Now” exhibit.

ACEP WOULD LIKE TO THANK THE FOLLOWING SPONSORS FOR THEIR SUPPORT OF THE COMING 50TH ANNIVERSARY.

WIEGENSEIN PRESENTING SPONSORS
CEP AMERICA
SCHUMACHER CLINICAL PARTNERS
TEAMHEALTH

PONTIAC PLAN SPONSORS
FUJIFILM SONOSITE
HBI–HAGAN BARRON INTERMEDIARIES

ACEP ALL STAR SPONSORS
IBERIABANK
ONSTAR
REACHMD
WILEY

WHO’S THE TOP RESIDENT LECTURER?
The EMRA 20 in 6 Resident Lecture Competition is hosted by residents for residents providing a unique venue at ACEP17 to feature the best resident speakers in the country, each competing to win the title of “2017 Best Resident Lecturer.” Residents are given up to six minutes and exactly 20 PowerPoint slides to lecture on any topic that is relevant to emergency medicine.

TUESDAY 20 in 6: EMRA Resident Lecture Competition
1–3 p.m.
Watch your fellow residents vie for the title of best resident lecturer.
Sponsored by HIPPO Education

WWW.ACEP.ORG/ACEP17
Boston, was a presenter of mHealth Toolbox, which bills itself as an interactive workshop for providers interested in health technology innovation. Dr. Dagan’s session at innovatED sought to pair physicians with mobile technology to discuss how devices should work for emergency physicians.

“We’re all very adept at making do with limited resources,” Dr. Dagan adds. “Talk to any emergency physician and they’ll have some tip or trick of how they take the nasal-cannula oxygen to dry the Dermabond. Everyone has these tricks of the trade … as physicians, it’s our responsibility to identify problems and then go to the engineers and say, ‘Hey, I’ve got this problem. Can you help me solve it?’ That’s what this is.”

For Carissa Tyo, MD, the problem to be solved is that emergency physicians spend so much time caring for patients, they forget to focus on their own well-being. She said so as she stretched out on an exercise ball at the Wellness Center, while people around her participated in “I EM Well” story booth for physicians to tell success stories.

“The message is absolutely invaluable,” said Dr. Tyo, of University of Illinois-Chicago. “We as docs don’t do a good job of taking care of ourselves … to an unfortunate extent, we don’t promote that enough within our specialty.”

RICHARD QUINN is a freelance writer in New Jersey.
For Passionate Supporters of Free Open Access Medical Education, ACEP\textsuperscript{7} provides an abundance of clinical and practice pearls that can enhance your time here at the ACEP annual meeting.

Can’t be in three places at once? That’s what the ACEP official Social Media Team is for—and of course the thousands of unofficial supporters who join us online. With all the live-tweeting of great lectures and discussions by some of your favorite ACEP faculty members, choosing between courses isn’t quite as difficult as it used to be. It’s almost like you can, in fact, be in more than one place at the same time.

Live-tweeting has become a staple of medical conferences, and with it has come some maturity. There appears to be a shift away from pure stenography. Sure, for those who could not attend, it’s nice to have some tweets that tell us what Dr. Corey Slovis just said. But as twitex expert Dr. Liam Yore (@movinnmedia) recently summarized in a tweetstorm (ie, a series of pre-planned tweets on a single topic, sent out in short succession; a bolus of tweets, if you will), most people on twitter want more than that. They want to understand the rules of engagement. So shame those, then you’re really never going to understand how she set out to improve the educational content at ACEP meetings. Years ago, she felt too many sessions were “too basic.” That’s how she defined the problem. Then she engaged by getting involved in ACEP’s education committee. She listened to others about how sessions were put together and, with that feedback, helped push for the action of creating shorter, “rapid fire” sessions that are now commonplace at the meeting.

As for the closure part, with the round of applause she got for saying she helped shorten most lectures would seem to be the imperatives of success.

“You can do this on a shift, right?” Dr. Broderick said. “You can walk into the shift and say, ‘Today, I want to have a successful shift.’ But what does that mean? Does it mean, ‘Today, I want to learn something in this shift’?... What is it? And then start down the path of doing it.”

Dr. Broderick also suggests emergency physicians reach for goals they’ll sometimes miss. She recounts the story of having joined an executive council at Denver Health so she could better connect her colleagues to the University of Colorado Denver’s leadership. So she got elected secretary of the council.

“My reach was a little too big,” Dr. Broderick said. “My goal was that we would be more involved at a higher level with the executive branch of the university, but I didn’t really understand the rules of engagement. So shame on me. I didn’t research it.”

Still, the experience meant she was setting goals for success. “If you don’t have some failures,” she said, “you’re probably not pushing the limit.”

Richard Quinn is a freelance writer in New Jersey.
TEAMHEALTH CONGRATULATES ITS 2017 EM MEDICAL DIRECTORS OF THE YEAR!

Every year, TeamHealth honors an emergency department Medical Director from each of its service regions. Selected from our nationwide team of Medical Directors, these individuals exemplify exceptional leadership at every level. Congratulations to our 2017 honorees!

Michael Eagan, MD  
Raritan Bay Medical Center, Perth Amboy, New Jersey

George Gurdock, DO  
Good Samaritan Medical Center, West Palm Beach, Florida

Guneesh Saluja, MD  
Ingalls Health System, Harvey, Illinois

Scott Scherr, MD  
Sunrise Hospital and Medical Center, Las Vegas, Nevada

MAKE AN IMPACT at ACEP17 in DC!

Stop by our booth #1129 to scan your ACEP badge and cast your vote on which world-class charity will receive a $25,000 donation from TeamHealth.

Join our team  
teamhealth.com/join or call 855.762.1652  
www.teamhealthcares.com