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ACEP17 Daily News

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MONDAY ISSUE

ACEP

Georgia Emergency Physician Dr. John Rogers Chosen as 2017–2018 President-Elect

WASHINGTON, D.C.—John Rogers, MD, FACEP, of Macon, Georgia, was elected 2017–2018 President-Elect of ACEP at the Council meeting on Saturday, Oct. 28., and will assume the presidency at next year's meeting in San Diego, California.

CONTINUED *on page 6*

PAUL KIM

Explore ACEP's History in the Resource Center

Open Monday and Tuesday, 9:30 a.m.–3:30 p.m., the 50th Anniversary Lounge is a place to see the journey so far before the big anniversary next year. Reflect on our amazing 50 years of history as a specialty and the role you've played in making ACEP great. The experience starts in Booth 327.

PAUL KIM

OPENING SESSION

Democracy's Final Exam: Will We Pass?

by RICHARD QUINN

WASHINGTON, D.C.—Journalism icon Bob Woodward sees the tumult of President Donald Trump's first year in office and understands that people—on both sides of the political aisle—think they know how the "final exam of American democracy" will unfold. But Mr. Woodward, the ACEP17 keynote speaker on Sunday, cautioned against judging too quickly, as he once did.

The Washington Post associate editor, who helped report and investigate the Watergate scandal that pushed President Richard Nixon to resign in 1974, thought he knew the story of

CONTINUED *on page 8*

HOW DO YOU GET STARTED IN ADVOCACY FOR YOUR SPECIALTY?

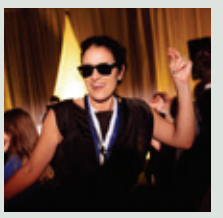
You already know that emergency physicians are the only health care providers who work 24-7-365 to care for patients, regardless of their ability to pay. Do your senators know this? They should.

The "Advocating for Change in Health Care Policy" course, led by Nathaniel R. Schlicher, MD, JD, FACEP, and Mary Jo Wagner, MD, FACEP, and moderated by Laura Wooster, MPH, will teach you all the key advocacy issues for emergency medicine at both the state and federal levels. You'll leave with an action plan for developing relationships with your legislators and working with your colleagues to advance EM's critical advocacy agenda.

Help Me, Senator! Advocating for Change in Health Care Policy

Monday, Oct. 30
4:30–5:30 p.m.
Room 145A

PLUS



PAUL KIM

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Are you aware of the variety of support resources available for ELIQUIS patients?

Think ELIQUIS for the treatment of DVT/PE.

DVT: deep vein thrombosis; PE: pulmonary embolism.

INDICATIONS

ELIQUIS is indicated for the treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE), and to reduce the risk of recurrent DVT and PE following initial therapy.

IMPORTANT SAFETY INFORMATION

WARNING: (A) PREMATURE DISCONTINUATION OF ELIQUIS INCREASES THE RISK OF THROMBOTIC EVENTS, (B) SPINAL/EPIDURAL HEMATOMA

(A) Premature discontinuation of any oral anticoagulant, including ELIQUIS, increases the risk of thrombotic events. If anticoagulation with ELIQUIS is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant.

(B) Epidural or spinal hematomas may occur in patients treated with ELIQUIS who are receiving neuraxial anesthesia or undergoing spinal puncture. These hematomas may result in long-term or permanent paralysis. Consider these risks when scheduling patients for spinal procedures. Factors that can increase the risk of developing epidural or spinal hematomas in these patients include:

- **use of indwelling epidural catheters**
- **concomitant use of other drugs that affect hemostasis, such as nonsteroidal anti-inflammatory drugs (NSAIDs), platelet inhibitors, other anticoagulants**
- **a history of traumatic or repeated epidural or spinal punctures**
- **a history of spinal deformity or spinal surgery**
- **optimal timing between the administration of ELIQUIS and neuraxial procedures is not known**

Monitor patients frequently for signs and symptoms of neurological impairment. If neurological compromise is noted, urgent treatment is necessary.

Consider the benefits and risks before neuraxial intervention in patients anticoagulated or to be anticoagulated.

CONTRAINDICATIONS

- Active pathological bleeding
- Severe hypersensitivity reaction to ELIQUIS (e.g., anaphylactic reactions)

WARNINGS AND PRECAUTIONS

- **Increased Risk of Thrombotic Events after Premature Discontinuation:** Premature discontinuation of any oral anticoagulant, including ELIQUIS, in the absence of adequate alternative anticoagulation increases the risk of thrombotic events. An increased rate of stroke was observed during the transition from ELIQUIS to warfarin in clinical trials in atrial fibrillation patients. If ELIQUIS is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant.
- **Bleeding Risk:** ELIQUIS increases the risk of bleeding and can cause serious, potentially fatal, bleeding.
  - Concomitant use of drugs affecting hemostasis increases the risk of bleeding, including aspirin and other antiplatelet agents, other anticoagulants, heparin, thrombolytic agents, SSRIs, SNRIs, and NSAIDs.
  - Advise patients of signs and symptoms of blood loss and to report them immediately or go to an emergency room. Discontinue ELIQUIS in patients with active pathological hemorrhage.
  - There is no established way to reverse the anticoagulant effect of apixaban, which can be expected to persist for at least 24 hours after the last dose (i.e., about two half-lives). A specific antidote for ELIQUIS is not available.
- **Spinal/Epidural Anesthesia or Puncture:** Patients treated with ELIQUIS undergoing spinal/epidural anesthesia or puncture may develop an epidural or spinal hematoma which can result in long-term or permanent paralysis.

  The risk of these events may be increased by the postoperative use of indwelling epidural catheters or the concomitant use of medicinal products affecting hemostasis. Indwelling epidural or intrathecal catheters should not be removed earlier than 24 hours after the last administration of ELIQUIS.

Eliquis®
(apixaban) tablets 5mg 2.5mg

In the hospital. At discharge. At home.
Consider ELIQUIS.

To learn more about transition of care resources, contact your ELIQUIS representative or call

1-855-ELIQUIS

IMPORTANT SAFETY INFORMATION

WARNINGS AND PRECAUTIONS (cont'd)

The next dose of ELIQUIS should not be administered earlier than 5 hours after the removal of the catheter. The risk may also be increased by traumatic or repeated epidural or spinal puncture. If traumatic puncture occurs, delay the administration of ELIQUIS for 48 hours.

Monitor patients frequently and if neurological compromise is noted, urgent diagnosis and treatment is necessary. Physicians should consider the potential benefit versus the risk of neuraxial intervention in ELIQUIS patients.

- **Prosthetic Heart Valves:** The safety and efficacy of ELIQUIS have not been studied in patients with prosthetic heart valves and is not recommended in these patients.
- **Acute PE in Hemodynamically Unstable Patients or Patients who Require Thrombolysis or Pulmonary Embolectomy:** Initiation of ELIQUIS is not recommended as an alternative to unfractionated heparin for the initial treatment of patients with PE who present with hemodynamic instability or who may receive thrombolysis or pulmonary embolectomy.

ADVERSE REACTIONS

- The most common and most serious adverse reactions reported with ELIQUIS were related to bleeding.

TEMPORARY INTERRUPTION FOR SURGERY AND OTHER INTERVENTIONS

- ELIQUIS should be discontinued at least 48 hours prior to elective surgery or invasive procedures with a moderate or high risk of unacceptable or clinically significant bleeding. ELIQUIS should be discontinued at least 24 hours prior to elective surgery or invasive procedures with a low risk of bleeding or where the bleeding would be noncritical in location and easily controlled. Bridging anticoagulation during the 24 to 48 hours after stopping ELIQUIS and prior to the intervention is not generally required. ELIQUIS should be restarted after the surgical or other procedures as soon as adequate hemostasis has been established.

Bristol-Myers Squibb Pfizer

IMPORTANT SAFETY INFORMATION

DRUG INTERACTIONS

- **Strong Dual Inhibitors of CYP3A4 and P-gp:** Inhibitors of cytochrome P450 3A4 (CYP3A4) and P-glycoprotein (P-gp) increase exposure to apixaban and increase the risk of bleeding. For patients receiving ELIQUIS doses of 5 mg or 10 mg twice daily, reduce the dose of ELIQUIS by 50% when ELIQUIS is coadministered with drugs that are strong dual inhibitors of CYP3A4 and P-gp (e.g., ketoconazole, itraconazole, ritonavir, or clarithromycin). In patients already taking 2.5 mg twice daily, avoid coadministration of ELIQUIS with strong dual inhibitors of CYP3A4 and P-gp.
- **Strong Dual Inducers of CYP3A4 and P-gp:** Avoid concomitant use of ELIQUIS with strong dual inducers of CYP3A4 and P-gp (e.g., rifampin, carbamazepine, phenytoin, St. John's wort) because such drugs will decrease exposure to apixaban and increase the risk of stroke and other thromboembolic events.
- **Anticoagulants and Antiplatelet Agents:** Coadministration of antiplatelet agents, fibrinolytics, heparin, aspirin, and chronic NSAID use increases the risk of bleeding. APPRAISE-2, a placebo-controlled clinical trial of apixaban in high-risk post-acute coronary syndrome patients treated with aspirin or the combination of aspirin and clopidogrel, was terminated early due to a higher rate of bleeding with apixaban compared to placebo.

PREGNANCY CATEGORY B

- There are no adequate and well-controlled studies of ELIQUIS in pregnant women. Treatment is likely to increase the risk of hemorrhage during pregnancy and delivery. ELIQUIS should be used during pregnancy only if the potential benefit outweighs the potential risk to the mother and fetus.

Please see Brief Summary of Full Prescribing Information, including **Boxed WARNINGS**, on adjacent pages.

ELIQUIS® (apixaban) tablets, for oral use

℞ ONLY

Brief Summary of Prescribing Information. For complete prescribing information consult official package insert.

WARNING: (A) PREMATURE DISCONTINUATION OF ELIQUIS INCREASES THE RISK OF THROMBOTIC EVENTS

(B) SPINAL/EPIDURAL HEMATOMA

(A) PREMATURE DISCONTINUATION OF ELIQUIS INCREASES THE RISK OF THROMBOTIC EVENTS

Premature discontinuation of any oral anticoagulant, including ELIQUIS, increases the risk of thrombotic events. If anticoagulation with ELIQUIS is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant *[see Dosage and Administration, Warnings and Precautions, and Clinical Studies (14.1) in full Prescribing Information]*.

(B) SPINAL/EPIDURAL HEMATOMA

Epidural or spinal hematomas may occur in patients treated with ELIQUIS who are receiving neuraxial anesthesia or undergoing spinal puncture. These hematomas may result in long-term or permanent paralysis. Consider these risks when scheduling patients for spinal procedures. Factors that can increase the risk of developing epidural or spinal hematomas in these patients include:

- **use of indwelling epidural catheters**
- **concomitant use of other drugs that affect hemostasis, such as nonsteroidal anti-inflammatory drugs (NSAIDs), platelet inhibitors, other anticoagulants**
- **a history of traumatic or repeated epidural or spinal punctures**
- **a history of spinal deformity or spinal surgery**
- **optimal timing between the administration of ELIQUIS and neuraxial procedures is not known**

[see Warnings and Precautions]

Monitor patients frequently for signs and symptoms of neurological impairment. If neurological compromise is noted, urgent treatment is necessary *[see Warnings and Precautions]*.

Consider the benefits and risks before neuraxial intervention in patients anticoagulated or to be anticoagulated *[see Warnings and Precautions]*.

INDICATIONS AND USAGE

Reduction of Risk of Stroke and Systemic Embolism in Nonvalvular Atrial Fibrillation— ELIQUIS® (apixaban) is indicated to reduce the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation.

Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery— ELIQUIS is indicated for the prophylaxis of deep vein thrombosis (DVT), which may lead to pulmonary embolism (PE), in patients who have undergone hip or knee replacement surgery.

Treatment of Deep Vein Thrombosis—ELIQUIS is indicated for the treatment of DVT.

Treatment of Pulmonary Embolism—ELIQUIS is indicated for the treatment of PE.

Reduction in the Risk of Recurrence of DVT and PE—ELIQUIS is indicated to reduce the risk of recurrent DVT and PE following initial therapy.

DOSAGE AND ADMINISTRATION (Selected information)

Temporary Interruption for Surgery and Other Interventions

ELIQUIS should be discontinued at least 48 hours prior to elective surgery or invasive procedures with a moderate or high risk of unacceptable or clinically significant bleeding. ELIQUIS should be discontinued at least 24 hours prior to elective surgery or invasive procedures with a low risk of bleeding or where the bleeding would be non-critical in location and easily controlled. Bridging anticoagulation during the 24 to 48 hours after stopping ELIQUIS and prior to the intervention is not generally required. ELIQUIS should be restarted after the surgical or other procedures as soon as adequate hemostasis has been established. (For complete *Dosage and Administration* section, see full Prescribing Information.)

CONTRAINDICATIONS

ELIQUIS is contraindicated in patients with the following conditions:

- Active pathological bleeding *[see Warnings and Precautions and Adverse Reactions]*
- Severe hypersensitivity reaction to ELIQUIS (e.g., anaphylactic reactions) *[see Adverse Reactions]*

WARNINGS AND PRECAUTIONS

Increased Risk of Thrombotic Events after Premature Discontinuation

Premature discontinuation of any oral anticoagulant, including ELIQUIS, in the absence of adequate alternative anticoagulation increases the risk of thrombotic events. An increased rate of stroke was observed during the transition from ELIQUIS to warfarin in clinical trials in atrial fibrillation patients. If ELIQUIS is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant *[see Dosage and Administration (2.4) and Clinical Studies (14.1) in full Prescribing Information]*.

Bleeding

ELIQUIS increases the risk of bleeding and can cause serious, potentially fatal, bleeding *[see Dosage and Administration (2.1) in full Prescribing Information and Adverse Reactions]*.

Concomitant use of drugs affecting hemostasis increases the risk of bleeding. These include aspirin and other antiplatelet agents, other anticoagulants, heparin, thrombolytic agents, selective serotonin reuptake inhibitors, serotonin norepinephrine reuptake inhibitors, and nonsteroidal anti-inflammatory drugs (NSAIDs) *[see Drug Interactions]*.

Advise patients of signs and symptoms of blood loss and to report them immediately or go to an emergency room. Discontinue ELIQUIS in patients with active pathological hemorrhage.

Reversal of Anticoagulant Effect

A specific antidote for ELIQUIS is not available, and there is no established way to reverse the bleeding in patients taking ELIQUIS. The pharmacodynamic effect of ELIQUIS can be expected to persist for at least 24 hours after the last dose, i.e., for about two drug half-lives. Use of procoagulant reversal agents, such as prothrombin complex concentrate (PCC), activated prothrombin complex concentrate or recombinant factor VIIa, may be considered but has not been evaluated in clinical studies *[see Clinical Pharmacology (12.2) in full Prescribing Information]*. When PCCs are used, monitoring for the anticoagulation effect of apixaban using a clotting test (PT, INR, or aPTT) or anti-factor Xa (FXa) activity is not useful and is not recommended. Activated oral charcoal reduces absorption of apixaban, thereby lowering apixaban plasma concentration *[see Overdosage]*.

Hemodialysis does not appear to have a substantial impact on apixaban exposure *[see Clinical Pharmacology (12.3) in full Prescribing Information]*. Protamine sulfate and vitamin K are not expected to affect the anticoagulant activity of apixaban. There is no experience with antifibrinolytic agents (tranexamic acid, aminocaproic acid) in individuals receiving apixaban. There is no experience with systemic hemostatics (desmopressin and aprotinin) in individuals receiving apixaban and they are not expected to be effective as a reversal agent.

Spinal/Epidural Anesthesia or Puncture

When neuraxial anesthesia (spinal/epidural anesthesia) or spinal/epidural puncture is employed, patients treated with antithrombotic agents for prevention of thromboembolic complications are at risk of developing an epidural or spinal hematoma which can result in long-term or permanent paralysis.

The risk of these events may be increased by the postoperative use of indwelling epidural catheters or the concomitant use of medicinal products affecting hemostasis. Indwelling epidural or intrathecal catheters should not be removed earlier than 24 hours after the last administration of ELIQUIS. The next dose of ELIQUIS should not be administered earlier than 5 hours after the removal of the catheter. The risk may also be increased by traumatic or repeated epidural or spinal puncture. If traumatic puncture occurs, delay the administration of ELIQUIS for 48 hours.

Monitor patients frequently for signs and symptoms of neurological impairment (e.g., numbness or weakness of the legs, bowel, or bladder dysfunction). If neurological compromise is noted, urgent diagnosis and treatment is necessary. Prior to neuraxial intervention the physician should consider the potential benefit versus the risk in anticoagulated patients or in patients to be anticoagulated for thromboprophylaxis.

Patients with Prosthetic Heart Valves

The safety and efficacy of ELIQUIS (apixaban) have not been studied in patients with prosthetic heart valves. Therefore, use of ELIQUIS is not recommended in these patients.

Acute PE in Hemodynamically Unstable Patients or Patients who Require Thrombolysis or Pulmonary Embolectomy

Initiation of ELIQUIS is not recommended as an alternative to unfractionated heparin for the initial treatment of patients with PE who present with hemodynamic instability or who may receive thrombolysis or pulmonary embolectomy.

ADVERSE REACTIONS

The following serious adverse reactions are discussed in greater detail in other sections of the prescribing information.

- Increased risk of thrombotic events after premature discontinuation *[see Warnings and Precautions]*
- Bleeding *[see Warnings and Precautions]*
- Spinal/epidural anesthesia or puncture *[see Warnings and Precautions]*

Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

Reduction of Risk of Stroke and Systemic Embolism in Patients with Nonvalvular Atrial Fibrillation

The safety of ELIQUIS was evaluated in the ARISTOTLE and AVERROES studies *[see Clinical Studies (14) in full Prescribing Information]*, including 11,284 patients exposed to ELIQUIS 5 mg twice daily and 602 patients exposed to ELIQUIS 2.5 mg twice daily. The duration of ELIQUIS exposure was ≥12 months for 9375 patients and ≥24 months for 3369 patients in the two studies. In ARISTOTLE, the mean duration of exposure was 89 weeks (>15,000 patient-years). In AVERROES, the mean duration of exposure was approximately 59 weeks (>3000 patient-years).

The most common reason for treatment discontinuation in both studies was for bleeding-related adverse reactions; in ARISTOTLE this occurred in 1.7% and 2.5% of patients treated with ELIQUIS and warfarin, respectively, and in AVERROES, in 1.5% and 1.3% on ELIQUIS and aspirin, respectively.

Bleeding in Patients with Nonvalvular Atrial Fibrillation in ARISTOTLE and AVERROES

Tables 1 and 2 show the number of patients experiencing major bleeding during the treatment period and the bleeding rate (percentage of subjects with at least one bleeding event per 100 patient-years) in ARISTOTLE and AVERROES.

Table 1: Bleeding Events in Patients with Nonvalvular Atrial Fibrillation in ARISTOTLE*

	ELIQUIS N=9088 n (per 100 pt-year)	Warfarin N=9052 n (per 100 pt-year)	Hazard Ratio (95% CI)	P-value
Major†	327 (2.13)	462 (3.09)	0.69 (0.60, 0.80)	<0.0001
Intracranial (ICH)‡	52 (0.33)	125 (0.82)	0.41 (0.30, 0.57)	-
Hemorrhagic stroke§	38 (0.24)	74 (0.49)	0.51 (0.34, 0.75)	-
Other ICH	15 (0.10)	51 (0.34)	0.29 (0.16, 0.51)	-
Gastrointestinal (GI)¶	128 (0.83)	141 (0.93)	0.89 (0.70, 1.14)	-
Fatal**	10 (0.06)	37 (0.24)	0.27 (0.13, 0.53)	-
Intracranial	4 (0.03)	30 (0.20)	0.13 (0.05, 0.37)	-
Non-intracranial	6 (0.04)	7 (0.05)	0.84 (0.28, 2.15)	-

* Bleeding events within each subcategory were counted once per subject, but subjects may have contributed events to multiple endpoints. Bleeding events were counted during treatment or within 2 days of stopping study treatment (on-treatment period).
† Defined as clinically overt bleeding accompanied by one or more of the following: a decrease in hemoglobin of ≥2 g/dL, a transfusion of 2 or more units of packed red blood cells, bleeding at a critical site: intracranial, intraspinal, intraocular, pericardial, intra-articular, intramuscular with compartment syndrome, retroperitoneal or with fatal outcome.
‡ Intracranial bleed includes intracerebral, intraventricular, subdural, and subarachnoid bleeding. Any type of hemorrhagic stroke was adjudicated and counted as an intracranial major bleed.
§ On-treatment analysis based on the safety population, compared to ITT analysis presented in Section 14.
¶ GI bleed includes upper GI, lower GI, and rectal bleeding.
** Fatal bleeding is an adjudicated death with the primary cause of death as intracranial bleeding or non-intracranial bleeding during the on-treatment period.

In ARISTOTLE, the results for major bleeding were generally consistent across most major subgroups including age, weight, $CHADS_2$ score (a scale from 0 to 6 used to estimate risk of stroke, with higher scores predicting greater risk), prior warfarin use, geographic region, and aspirin use at randomization (Figure 1). Subjects treated with apixaban with diabetes bled more (3.0% per year) than did subjects without diabetes (1.9% per year).

Table 2: Bleeding Events in Patients with Nonvalvular Atrial Fibrillation in AVERROES

	ELIQUIS (apixaban) N=2798 n (%/year)	Aspirin N=2780 n (%/year)	Hazard Ratio (95% CI)	P-value
Major	45 (1.41)	29 (0.92)	1.54 (0.96, 2.45)	0.07
Fatal	5 (0.16)	5 (0.16)	0.99 (0.23, 4.29)	-
Intracranial	11 (0.34)	11 (0.35)	0.99 (0.39, 2.51)	-

Events associated with each endpoint were counted once per subject, but subjects may have contributed events to multiple endpoints.

Other Adverse Reactions

Hypersensitivity reactions (including drug hypersensitivity, such as skin rash, and anaphylactic reactions, such as allergic edema) and syncope were reported in <1% of patients receiving ELIQUIS.

Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery

The safety of ELIQUIS has been evaluated in 1 Phase II and 3 Phase III studies including 5924 patients exposed to ELIQUIS 2.5 mg twice daily undergoing major orthopedic surgery of the lower limbs (elective hip replacement or elective knee replacement) treated for up to 38 days.

In total, 11% of the patients treated with ELIQUIS 2.5 mg twice daily experienced adverse reactions.

Bleeding results during the treatment period in the Phase III studies are shown in Table 3. Bleeding was assessed in each study beginning with the first dose of double-blind study drug.

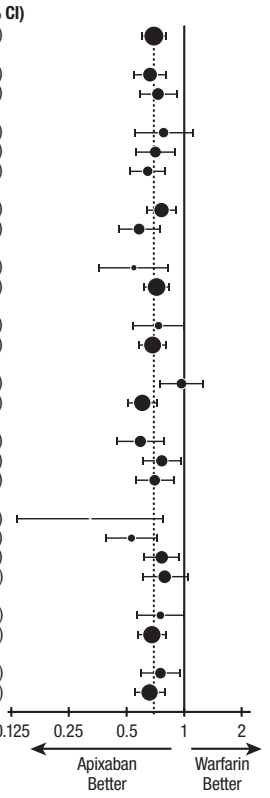
Table 3: Bleeding During the Treatment Period in Patients Undergoing Elective Hip or Knee Replacement Surgery

Bleeding Endpoint*	ADVANCE-3 Hip Replacement Surgery		ADVANCE-2 Knee Replacement Surgery		ADVANCE-1 Knee Replacement Surgery	
	ELIQUIS 2.5 mg po bid 35±3 days	Enoxaparin 40 mg sc qd 35±3 days	ELIQUIS 2.5 mg po bid 12±2 days	Enoxaparin 40 mg sc qd 12±2 days	ELIQUIS 2.5 mg po bid 12±2 days	Enoxaparin 30 mg sc q12h 12±2 days
	First dose 12 to 24 hours post surgery	First dose 9 to 15 hours prior to surgery	First dose 12 to 24 hours post surgery	First dose 9 to 15 hours prior to surgery	First dose 12 to 24 hours post surgery	First dose 12 to 24 hours post surgery
All treated	N=2673	N=2659	N=1501	N=1508	N=1596	N=1588
Major (including surgical site)	22 (0.82%)†	18 (0.68%)	9 (0.60%)‡	14 (0.93%)	11 (0.69%)	22 (1.39%)
Fatal	0	0	0	0	0	1 (0.06%)
Hgb decrease ≥2 g/dL	13 (0.49%)	10 (0.38%)	8 (0.53%)	9 (0.60%)	10 (0.63%)	16 (1.01%)
Transfusion of ≥2 units RBC	16 (0.60%)	14 (0.53%)	5 (0.33%)	9 (0.60%)	9 (0.56%)	18 (1.13%)
Bleed at critical site§	1 (0.04%)	1 (0.04%)	1 (0.07%)	2 (0.13%)	1 (0.06%)	4 (0.25%)
Major + CRNM¶	129 (4.83%)	134 (5.04%)	53 (3.53%)	72 (4.77%)	46 (2.88%)	68 (4.28%)
All	313 (11.71%)	334 (12.56%)	104 (6.93%)	126 (8.36%)	85 (5.33%)	108 (6.80%)

* All bleeding criteria included surgical site bleeding.
† Includes 13 subjects with major bleeding events that occurred before the first dose of apixaban (administered 12 to 24 hours post surgery).
‡ Includes 5 subjects with major bleeding events that occurred before the first dose of apixaban (administered 12 to 24 hours post surgery).
§ Intracranial, intraspinal, intraocular, pericardial, an operated joint requiring re-operation or intervention, intramuscular with compartment syndrome, or retroperitoneal. Bleeding into an operated joint requiring re-operation or intervention was present in all patients with this category of bleeding. Events and event rates include one enoxaparin-treated patient in ADVANCE-1 who also had intracranial hemorrhage.
¶ CRNM = clinically relevant nonmajor.

Figure 1: Major Bleeding Hazard Ratios by Baseline Characteristics – ARISTOTLE Study

Subgroup	n of Events / N of Patients (% per year) Apixaban	Warfarin	Hazard Ratio (95% CI)
All Patients	327 / 9088 (2.1)	462 / 9052 (3.1)	0.69 (0.60, 0.80)
Prior Warfarin/VKA Status			
Experienced (57%)	185 / 5196 (2.1)	274 / 5180 (3.2)	0.66 (0.55, 0.80)
Naive (43%)	142 / 3892 (2.2)	188 / 3872 (3.0)	0.73 (0.59, 0.91)
Age			
<65 (30%)	56 / 2723 (1.2)	72 / 2732 (1.5)	0.78 (0.55, 1.11)
≥65 and <75 (39%)	120 / 3529 (2.0)	166 / 3501 (2.8)	0.71 (0.56, 0.89)
≥75 (31%)	151 / 2836 (3.3)	224 / 2819 (5.2)	0.64 (0.52, 0.79)
Sex			
Male (65%)	225 / 5868 (2.3)	294 / 5879 (3.0)	0.76 (0.64, 0.90)
Female (35%)	102 / 3220 (1.9)	168 / 3173 (3.3)	0.58 (0.45, 0.74)
Weight			
≤60 kg (11%)	36 / 1013 (2.3)	62 / 965 (4.3)	0.55 (0.36, 0.83)
>60 kg (89%)	290 / 8043 (2.1)	398 / 8059 (3.0)	0.72 (0.62, 0.83)
Prior Stroke or TIA			
Yes (19%)	77 / 1687 (2.8)	106 / 1735 (3.9)	0.73 (0.54, 0.98)
No (81%)	250 / 7401 (2.0)	356 / 7317 (2.9)	0.68 (0.58, 0.80)
Diabetes Mellitus			
Yes (25%)	112 / 2276 (3.0)	114 / 2250 (3.1)	0.96 (0.74, 1.25)
No (75%)	215 / 6812 (1.9)	348 / 6802 (3.1)	0.60 (0.51, 0.71)
$CHADS_2$ Score			
≤1 (34%)	76 / 3093 (1.4)	126 / 3076 (2.3)	0.59 (0.44, 0.78)
2 (36%)	125 / 3246 (2.3)	163 / 3246 (3.0)	0.76 (0.60, 0.96)
≥3 (30%)	126 / 2749 (2.9)	173 / 2730 (4.1)	0.70 (0.56, 0.88)
Creatinine Clearance			
<30 mL/min (1%)	7 / 136 (3.7)	19 / 132 (11.9)	0.32 (0.13, 0.78)
30-50 mL/min (15%)	66 / 1357 (3.2)	123 / 1380 (6.0)	0.53 (0.39, 0.71)
>50-80 mL/min (42%)	157 / 3807 (2.5)	199 / 3758 (3.2)	0.76 (0.62, 0.94)
>80 mL/min (41%)	96 / 3750 (1.5)	119 / 3746 (1.8)	0.79 (0.61, 1.04)
Geographic Region			
US (19%)	83 / 1716 (2.8)	109 / 1693 (3.8)	0.75 (0.56, 1.00)
Non-US (81%)	244 / 7372 (2.0)	353 / 7359 (2.9)	0.68 (0.57, 0.80)
Aspirin at Randomization			
Yes (31%)	129 / 2846 (2.7)	164 / 2762 (3.7)	0.75 (0.60, 0.95)
No (69%)	198 / 6242 (1.9)	298 / 6290 (2.8)	0.66 (0.55, 0.79)



Note: The figure above presents effects in various subgroups, all of which are baseline characteristics and all of which were pre-specified, if not the groupings. The 95% confidence limits that are shown do not take into account how many comparisons were made, nor do they reflect the effect of a particular factor after adjustment for all other factors. Apparent homogeneity or heterogeneity among groups should not be over-interpreted.

Adverse reactions occurring in ≥1% of patients undergoing hip or knee replacement surgery in the 1 Phase II study and the 3 Phase III studies are listed in Table 4.

Table 4: Adverse Reactions Occurring in ≥1% of Patients in Either Group Undergoing Hip or Knee Replacement Surgery

	ELIQUIS (apixaban), n (%) 2.5 mg po bid N=5924	Enoxaparin, n (%) 40 mg sc qd or 30 mg sc q12h N=5904
Nausea	153 (2.6)	159 (2.7)
Anemia (including postoperative and hemorrhagic anemia, and respective laboratory parameters)	153 (2.6)	178 (3.0)
Contusion	83 (1.4)	115 (1.9)
Hemorrhage (including hematoma, and vaginal and urethral hemorrhage)	67 (1.1)	81 (1.4)
Postprocedural hemorrhage (including postprocedural hematoma, wound hemorrhage, vessel puncture site hematoma and catheter site hemorrhage)	54 (0.9)	60 (1.0)
Transaminases increased (including alanine aminotransferase increased and alanine aminotransferase abnormal)	50 (0.8)	71 (1.2)
Aspartate aminotransferase increased	47 (0.8)	69 (1.2)
Gamma-glutamyltransferase increased	38 (0.6)	65 (1.1)

Less common adverse reactions in apixaban-treated patients undergoing hip or knee replacement surgery occurring at a frequency of ≥0.1% to <1%:

Blood and lymphatic system disorders: thrombocytopenia (including platelet count decreases)

Vascular disorders: hypotension (including procedural hypotension)

Respiratory, thoracic, and mediastinal disorders: epistaxis

Gastrointestinal disorders: gastrointestinal hemorrhage (including hematemesis and melena), hematochezia

Hepatobiliary disorders: liver function test abnormal, blood alkaline phosphatase increased, blood bilirubin increased

Renal and urinary disorders: hematuria (including respective laboratory parameters)

Injury, poisoning, and procedural complications: wound secretion, incision-site hemorrhage (including incision-site hematoma), operative hemorrhage

Less common adverse reactions in apixaban-treated patients undergoing hip or knee replacement surgery occurring at a frequency of <0.1%:

Gingival bleeding, hemoptysis, hypersensitivity, muscle hemorrhage, ocular hemorrhage (including conjunctival hemorrhage), rectal hemorrhage

Treatment of DVT and PE and Reduction in the Risk of Recurrence of DVT or PE

The safety of ELIQUIS has been evaluated in the AMPLIFY and AMPLIFY-EXT studies, including 2676 patients exposed to ELIQUIS 10 mg twice daily, 3359 patients exposed to ELIQUIS 5 mg twice daily, and 840 patients exposed to ELIQUIS 2.5 mg twice daily.

Common adverse reactions (≥1%) were gingival bleeding, epistaxis, contusion, hematuria, rectal hemorrhage, hematoma, menorrhagia, and hemoptysis.

AMPLIFY Study

The mean duration of exposure to ELIQUIS was 154 days and to enoxaparin/warfarin was 152 days in the AMPLIFY study. Adverse reactions related to bleeding occurred in 417 (15.6%) ELIQUIS-treated patients compared to 661 (24.6%) enoxaparin/warfarin-treated patients. The discontinuation rate due to bleeding events was 0.7% in the ELIQUIS-treated patients compared to 1.7% in enoxaparin/warfarin-treated patients in the AMPLIFY study.

In the AMPLIFY study, ELIQUIS was statistically superior to enoxaparin/warfarin in the primary safety endpoint of major bleeding (relative risk 0.31, 95% CI [0.17, 0.55], P-value <0.0001).

Bleeding results from the AMPLIFY study are summarized in Table 5.

Table 5: Bleeding Results in the AMPLIFY Study

	ELIQUIS N=2676 n (%)	Enoxaparin/Warfarin N=2689 n (%)	Relative Risk (95% CI)
Major	15 (0.6)	49 (1.8)	0.31 (0.17, 0.55) p<0.0001
CRNM*	103 (3.9)	215 (8.0)	
Major + CRNM	115 (4.3)	261 (9.7)	
Minor	313 (11.7)	505 (18.8)	
All	402 (15.0)	676 (25.1)	

* CRNM = clinically relevant nonmajor bleeding.
Events associated with each endpoint were counted once per subject, but subjects may have contributed events to multiple endpoints.

Adverse reactions occurring in ≥1% of patients in the AMPLIFY study are listed in Table 6.

Table 6: Adverse Reactions Occurring in ≥1% of Patients Treated for DVT and PE in the AMPLIFY Study

	ELIQUIS N=2676 n (%)	Enoxaparin/Warfarin N=2689 n (%)
Epistaxis	77 (2.9)	146 (5.4)
Contusion	49 (1.8)	97 (3.6)
Hematuria	46 (1.7)	102 (3.8)
Menorrhagia	38 (1.4)	30 (1.1)
Hematoma	35 (1.3)	76 (2.8)
Hemoptysis	32 (1.2)	31 (1.2)
Rectal hemorrhage	26 (1.0)	39 (1.5)
Gingival bleeding	26 (1.0)	50 (1.9)

AMPLIFY-EXT Study

The mean duration of exposure to ELIQUIS was approximately 330 days and to placebo was 312 days in the AMPLIFY-EXT study. Adverse reactions related to bleeding occurred in 219 (13.3%) ELIQUIS-treated patients compared to 72 (8.7%) placebo-treated patients. The discontinuation rate due to bleeding events was approximately 1% in the ELIQUIS-treated patients compared to 0.4% in those patients in the placebo group in the AMPLIFY-EXT study.

Bleeding results from the AMPLIFY-EXT study are summarized in Table 7.

Table 7: Bleeding Results in the AMPLIFY-EXT Study

	ELIQUIS (apixaban) 2.5 mg bid N=840 n (%)	ELIQUIS 5 mg bid N=811 n (%)	Placebo N=826 n (%)
Major	2 (0.2)	1 (0.1)	4 (0.5)
CRNM*	25 (3.0)	34 (4.2)	19 (2.3)
Major + CRNM	27 (3.2)	35 (4.3)	22 (2.7)
Minor	75 (8.9)	98 (12.1)	58 (7.0)
All	94 (11.2)	121 (14.9)	74 (9.0)

* CRNM = clinically relevant nonmajor bleeding.
Events associated with each endpoint were counted once per subject, but subjects may have contributed events to multiple endpoints.

Adverse reactions occurring in ≥1% of patients in the AMPLIFY-EXT study are listed in Table 8.

Table 8: Adverse Reactions Occurring in ≥1% of Patients Undergoing Extended Treatment for DVT and PE in the AMPLIFY-EXT Study

	ELIQUIS 2.5 mg bid N=840 n (%)	ELIQUIS 5 mg bid N=811 n (%)	Placebo N=826 n (%)
Epistaxis	13 (1.5)	29 (3.6)	9 (1.1)
Hematuria	12 (1.4)	17 (2.1)	9 (1.1)
Hematoma	13 (1.5)	16 (2.0)	10 (1.2)
Contusion	18 (2.1)	18 (2.2)	18 (2.2)
Gingival bleeding	12 (1.4)	9 (1.1)	3 (0.4)

Other Adverse Reactions

Less common adverse reactions in ELIQUIS-treated patients in the AMPLIFY or AMPLIFY-EXT studies occurring at a frequency of ≥0.1% to <1%:

Blood and lymphatic system disorders: hemorrhagic anemia

Gastrointestinal disorders: hematochezia, hemorrhoidal hemorrhage, gastrointestinal hemorrhage, hematemesis, melena, anal hemorrhage

Injury, poisoning, and procedural complications: wound hemorrhage, postprocedural hemorrhage, traumatic hematoma, periorbital hematoma

Musculoskeletal and connective tissue disorders: muscle hemorrhage

Reproductive system and breast disorders: vaginal hemorrhage, metrorrhagia, menometrorrhagia, genital hemorrhage

Vascular disorders: hemorrhage

Skin and subcutaneous tissue disorders: ecchymosis, skin hemorrhage, petechiae

Eye disorders: conjunctival hemorrhage, retinal hemorrhage, eye hemorrhage

Investigations: blood urine present, occult blood positive, occult blood, red blood cells urine positive

General disorders and administration-site conditions: injection-site hematoma, vessel puncture-site hematoma

DRUG INTERACTIONS

Apixaban is a substrate of both CYP3A4 and P-gp. Inhibitors of CYP3A4 and P-gp increase exposure to apixaban and increase the risk of bleeding. Inducers of CYP3A4 and P-gp decrease exposure to apixaban and increase the risk of stroke and other thromboembolic events.

Strong Dual Inhibitors of CYP3A4 and P-gp

For patients receiving ELIQUIS 5 mg or 10 mg twice daily, the dose of ELIQUIS should be decreased by 50% when it is coadministered with drugs that are strong dual inhibitors of CYP3A4 and P-gp (e.g., ketoconazole, itraconazole, ritonavir, or clarithromycin) *[see Dosage and Administration (2.5) and Clinical Pharmacology (12.3) in full Prescribing Information]*.

For patients receiving ELIQUIS at a dose of 2.5 mg twice daily, avoid coadministration with strong dual inhibitors of CYP3A4 and P-gp *[see Dosage and Administration (2.5) and Clinical Pharmacology (12.3) in full Prescribing Information]*.

Strong Dual Inducers of CYP3A4 and P-gp

Avoid concomitant use of ELIQUIS with strong dual inducers of CYP3A4 and P-gp (e.g., rifampin, carbamazepine, phenytoin, St. John's wort) because such drugs will decrease exposure to apixaban *[see Clinical Pharmacology (12.3) in full Prescribing Information]*.

Anticoagulants and Antiplatelet Agents

Coadministration of antiplatelet agents, fibrinolytics, heparin, aspirin, and chronic NSAID use increases the risk of bleeding.

APPRAISE-2, a placebo-controlled clinical trial of apixaban in high-risk, post-acute coronary syndrome patients treated with aspirin or the combination of aspirin and clopidogrel, was terminated early due to a higher rate of bleeding with apixaban compared to placebo. The rate of ISTH major bleeding was 2.8% per year with apixaban versus 0.6% per year with placebo in patients receiving single antiplatelet therapy and was 5.9% per year with apixaban versus 2.5% per year with placebo in those receiving dual antiplatelet therapy.

In ARISTOTLE, concomitant use of aspirin increased the bleeding risk on ELIQUIS from 1.8% per year to 3.4% per year and concomitant use of aspirin and warfarin increased the bleeding risk from 2.7% per year to 4.6% per year. In this clinical trial, there was limited (2.3%) use of dual antiplatelet therapy with ELIQUIS.

USE IN SPECIFIC POPULATIONS

Pregnancy

Pregnancy Category B

There are no adequate and well-controlled studies of ELIQUIS in pregnant women. Treatment is likely to increase the risk of hemorrhage during pregnancy and delivery. ELIQUIS should be used during pregnancy only if the potential benefit outweighs the potential risk to the mother and fetus.

Treatment of pregnant rats, rabbits, and mice after implantation until the end of gestation resulted in fetal exposure to apixaban, but was not associated with increased risk for fetal malformations or toxicity. No maternal or fetal deaths were attributed to bleeding. Increased incidence of maternal bleeding was observed in mice, rats, and rabbits at maternal exposures that were 19, 4, and 1 times, respectively, the human exposure of unbound drug, based on area under plasma-concentration time curve (AUC) comparisons at the maximum recommended human dose (MRHD) of 10 mg (5 mg twice daily).

Labor and Delivery

Safety and effectiveness of ELIQUIS during labor and delivery have not been studied in clinical trials. Consider the risks of bleeding and of stroke in using ELIQUIS in this setting *[see Warnings and Precautions]*.

Treatment of pregnant rats from implantation (gestation Day 7) to weaning (lactation Day 21) with apixaban at a dose of 1000 mg/kg (about 5 times the human exposure based on unbound apixaban) did not result in death of offspring or death of mother rats during labor in association with uterine bleeding. However, increased incidence of maternal bleeding, primarily during gestation, occurred at apixaban doses of ≥25 mg/kg, a dose corresponding to ≥1.3 times the human exposure.

Nursing Mothers

It is unknown whether apixaban or its metabolites are excreted in human milk. Rats excrete apixaban in milk (12% of the maternal dose).

Women should be instructed either to discontinue breastfeeding or to discontinue ELIQUIS (apixaban) therapy, taking into account the importance of the drug to the mother.

Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

Geriatric Use

Of the total subjects in the ARISTOTLE and AVERROES clinical studies, >69% were 65 and older, and >31% were 75 and older. In the ADVANCE-1, ADVANCE-2, and ADVANCE-3 clinical studies, 50% of subjects were 65 and older, while 16% were 75 and older. In the AMPLIFY and AMPLIFY-EXT clinical studies, >32% of subjects were 65 and older and >13% were 75 and older. No clinically significant differences in safety or effectiveness were observed when comparing subjects in different age groups.

Renal Impairment

Reduction of Risk of Stroke and Systemic Embolism in Patients with Nonvalvular Atrial Fibrillation

The recommended dose is 2.5 mg twice daily in patients with at least two of the following characteristics *[see Dosage and Administration (2.1) in full Prescribing Information]*:

- age ≥80 years
- body weight ≤60 kg
- serum creatinine ≥1.5 mg/dL

Patients with End-Stage Renal Disease on Dialysis

Clinical efficacy and safety studies with ELIQUIS did not enroll patients with end-stage renal disease (ESRD) on dialysis. In patients with ESRD maintained on intermittent hemodialysis, administration of ELIQUIS at the usually recommended dose *[see Dosage and Administration (2.1) in full Prescribing Information]* will result in concentrations of apixaban and pharmacodynamic activity similar to those observed in the ARISTOTLE study *[see Clinical Pharmacology (12.3) in full Prescribing Information]*. It is not known whether these concentrations will lead to similar stroke reduction and bleeding risk in patients with ESRD on dialysis as was seen in ARISTOTLE.

Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery, and Treatment of DVT and PE and Reduction in the Risk of Recurrence of DVT and PE

No dose adjustment is recommended for patients with renal impairment, including those with ESRD on dialysis *[see Dosage and Administration (2.1) in full Prescribing Information]*.

Clinical efficacy and safety studies with ELIQUIS did not enroll patients with ESRD on dialysis or patients with a CrCl <15 mL/min; therefore, dosing recommendations are based on pharmacokinetic and pharmacodynamic (anti-FXa activity) data in subjects with ESRD maintained on dialysis *[see Clinical Pharmacology (12.3) in full Prescribing Information]*.

Hepatic Impairment

No dose adjustment is required in patients with mild hepatic impairment (Child-Pugh class A). Because patients with moderate hepatic impairment (Child-Pugh class B) may have intrinsic coagulation abnormalities and there is limited clinical experience with ELIQUIS in these patients, dosing recommendations cannot be provided *[see Clinical Pharmacology (12.2) in full Prescribing Information]*. ELIQUIS is not recommended in patients with severe hepatic impairment (Child-Pugh class C) *[see Clinical Pharmacology (12.2) in full Prescribing Information]*.

OVERDOSAGE

There is no antidote to ELIQUIS. Overdose of ELIQUIS increases the risk of bleeding *[see Warnings and Precautions]*.

In controlled clinical trials, orally administered apixaban in healthy subjects at doses up to 50 mg daily for 3 to 7 days (25 mg twice daily for 7 days or 50 mg once daily for 3 days) had no clinically relevant adverse effects.

In healthy subjects, administration of activated charcoal 2 and 6 hours after ingestion of a 20-mg dose of apixaban reduced mean apixaban AUC by 50% and 27%, respectively. Thus, administration of activated charcoal may be useful in the management of apixaban overdose or accidental ingestion.

PATIENT COUNSELING INFORMATION

Advise patients to read the FDA-approved patient labeling (Medication Guide).

Advise patients of the following:

- Not to discontinue ELIQUIS without talking to their physician first.
- That it might take longer than usual for bleeding to stop, and they may bruise or bleed more easily when treated with ELIQUIS. Advise patients about how to recognize bleeding or symptoms of hypovolemia and of the urgent need to report any unusual bleeding to their physician.
- To tell their physicians and dentists they are taking ELIQUIS, and/or any other product known to affect bleeding (including nonprescription products, such as aspirin or NSAIDs), before any surgery or medical or dental procedure is scheduled and before any new drug is taken.
- If the patient is having neuraxial anesthesia or spinal puncture, inform the patient to watch for signs and symptoms of spinal or epidural hematomas *[see Warnings and Precautions]*. If any of these symptoms occur, advise the patient to seek emergent medical attention.
- To tell their physicians if they are pregnant or plan to become pregnant or are breastfeeding or intend to breastfeed during treatment with ELIQUIS *[see Use in Specific Populations]*.
- How to take ELIQUIS if they cannot swallow, or require a nasogastric tube *[see Dosage and Administration (2.6) in full Prescribing Information]*.
- What to do if a dose is missed *[see Dosage and Administration (2.2) in full Prescribing Information]*.

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ACEP

Congratulations to the new and re-elected Board members: (left to right) Alison Haddock, MD, FACEP; Stephen H. Anderson, MD, FACEP (re-elected); Jon Mark Hirshon, MD, PhD, MPH, FACEP (re-elected); Aisha T. Liferidge, MD, FACEP.

ELECT | CONTINUED FROM PAGE 1

"Significant changes are occurring in our nation's health care system, and emergency medicine will continue to play a vital role," said Dr. Rogers. "Emergency physicians are the only ones available 24-7—no appointment necessary. Protecting people's access to emergency care and making sure that people have fair insurance coverage for emergency care are two of my priorities."

For the past year, Dr. Rogers has served as Chairman of ACEP's Board of Directors. He is co-emergency department medical director at Coliseum Northside Hospital in Macon, Georgia. He has served as chairman of the Emergency Medicine Foundation, president of the Georgia College of Emergency Physicians, Delegate to the Medical Association of Georgia, and president of his hospital medical staff. Dr. Rogers was first elected to ACEP's Board in 2011.

"Physicians lead differently," said Dr. Rogers. "Physicians are motivated by patient-centric principles, not politics, profit, or personal gain. We are here on this earth for a purpose, our chosen purpose: to care for the acutely ill and injured. We are here...because we care about our patients, our craft, and those who practice it."

Dr. Rogers completed his medical degree at the University of Iowa. He did his residency in the Department of Surgery at Medical Center of Central Georgia (now Mercer University) in Macon.

ACEP

Congratulations to new Council Officers: (left to right) Vice Speaker Gary R. Katz, MD, MBA, FACEP; Speaker John G. McManus, Jr., MD, MBA, FACEP.

Work Hard, Play Hard with EMRA

The Emergency Medicine Residents Association (EMRA) activities begin today with a hard-core simulation competition and will finish with an epic party. EMRA events come at no charge to residents and medical students.

MONDAY

EMRA Resident SIMWars Competition

9 a.m.–3 p.m.

Marriott Marquis, Liberty Ballroom, Salon L, Meeting Level 4

In this high-fidelity simulation competition, partcipants help decide the winning team.

EMRA Party at Echostage

10 p.m.–2 a.m.

Echostage
2135 Queens Chapel Rd. NE, Washington, D.C.

Come join EMRA members for a fantastic evening!

Sponsored by Envision Physician Services

ACEP17 Daily News

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PAUL KIM

Q: WHY DID YOU COME TO ACEP17?

"I'm still looking for a niche. I have a lot of interest and I like a lot of things. And I can't decide what I really want to hone in on as a provider now that I'm done with all my training. [This meeting] kind of helps ... recapture my focus and my motivation."

- Danielle Mercurio, DO, FAAP, pediatric emergency physician, Johns Hopkins All Children's Hospital, St. Petersburg, Florida

OPENING SESSION

| CONTINUED FROM PAGE 1

President Gerald Ford pardoning Nixon shortly thereafter.

"It's the final corruption of Watergate," Mr. Woodward told a crowded ballroom of emergency physicians. "There was an aroma of a deal between Nixon and Ford. Ford gets the presidency. Nixon resigns, but is pardoned."

But some 25 years later, Mr. Woodward spoke to Ford for the first time about why he pardoned Nixon. "Ford said, in this plaintive voice I will never forget, 'You know, I needed my own presidency,'" Mr. Woodward said. "'The country had to move on. I had to move on. The only way to get Nixon off the front page and into history was to pardon him. That was the national interest.'"

The pardon helped cost Ford the 1976 presidential election, but the lesson to Mr. Woodward was that "the lens of history" frames a different picture. It's a valuable perspective as President Trump's "energized" pace prompts the media to forecast the future and question his motives.

"I was so sure I knew in '74, not just what had happened, but what it meant," Mr. Woodward said, adding, "It is a lesson that will never leave me and it is a lesson that we sit in this moment in history, which is a really, really important moment, and I think the stakes could not be higher about what Trump's going to do, but we don't know."

Mr. Woodward said the media must be careful in its tone and coverage of President Trump, lest its credibility be further eroded. And it has to "entertain the possibility ... that Trump is operating in good faith" to do the job of the president.

So how does Mr. Woodward, who has written books on eight presidents and is working on his ninth, define the job description for the world's most powerful man?

"To figure out what the next stage of good is for a majority of people in the country," he said, "A real majority. Not one party, not interest groups, not a series of interest groups. But really step back and say, 'What do we need?'"

And the answer to that question will truly determine how the "final exam of American democracy" goes.


PAUL KIM

ACEP's Opening General Session Sunday drew a full house at the Washington Convention Center.

RICHARD QUINN is a freelance writer in New Jersey.

ACEP Council Reviews Opioid Policies and More at Annual Meeting

WASHINGTON, D.C.—The 2017 ACEP Council considered several resolutions during its annual meeting this week, including issues related to public policies, clinical matters, and emergency medicine practice trends.

This year's 410-member Council represents all 53 chapters, 37 ACEP sections of membership, the Emergency Medicine Residents' Association (EMRA), the Association of Academic Chairs in Emergency Medicine, the Council of Emergency Medicine Residency Directors, and the Society of Academic Emergency Medicine.

The resolutions adopted by the Council do not become College policy until they are reviewed and approved by the ACEP Board of Directors on Wednesday.

The Council considered a resolution on endorsing paid parental leave for emergency physicians, and after debate on both sides, an amended version was ultimately adopted. Those opposed stated that paid leave is not feasible for small democratic group practices or for certain other types of employment pay structures, while those in favor argued that being able to take time off to care for children was a wellness issue as well as a burnout issue.

The Council also considered a resolution on the usage of freestanding emergency centers during federally declared disasters. After debate on both sides, the Council voted to refer this resolution to the Board of Directors.

The Council also adopted resolutions related to:

- 9-1-1 number access and pre-arrival instructions
- Coverage for patient home medication while under observation status
- CPR training
- Demonstrating the value of emergency medicine to policymakers and the public
- Development and study of supervised injection facilities
- Maternity and paternity leave
- ACEP Wellness Center services
- Resolution co-sponsorship memo
- Studying the impact and potential membership benefits of a new chapter or section representing locums physicians
- Chapter bylaws conformance standards
- Seating of past Chairs of the Board in the ACEP Council
- Funding of emergency medicine training
- Information sharing, regular ACEP/Chapter contact, and regional state/chapter relationships
- Essential medicines
- Generic injectable drug shortages
- Expanding ACEP policy on workforce diversity in health care settings
- Guidelines for opioid prescribing
- Participation in ED information exchange and prescription drug monitoring systems
- Retirement or interruption of clinical emergency practice
- Workplace violence
- Support for harm reduction and syringe services programs

The Council referred these resolutions to the Board of Directors for further discussion:

- Legislation requiring hyperbaric medicine facility accreditation for federal payment
- Prescription drug pricing
- Freestanding emergency centers as a care model for maintaining access to emergency care in underserved, rural, and federally declared disaster areas
- Immigrant and non-citizen access to care
- Reimbursement for hepatitis C virus testing performed in the emergency department
- Maintenance of competence for practicing emergency physicians
- Group contract negotiation to end-of-term timeframes
- Impact of climate change on patient health and implications for emergency medicine
- Improving patient safety through transparency in malpractice settlements
- Non-fatal strangulation
- Promoting clinical effectiveness

Improve Quality with CEDR and E-QUAL

PAUL KIM

CEDR

As part of its ongoing commitment to providing 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.

Monday, 7 a.m.–6 p.m.;
Tuesday, 7:30 a.m.–5:30 p.m.
Walter E. Washington Convention Center, Level 1, West Salon Foyer

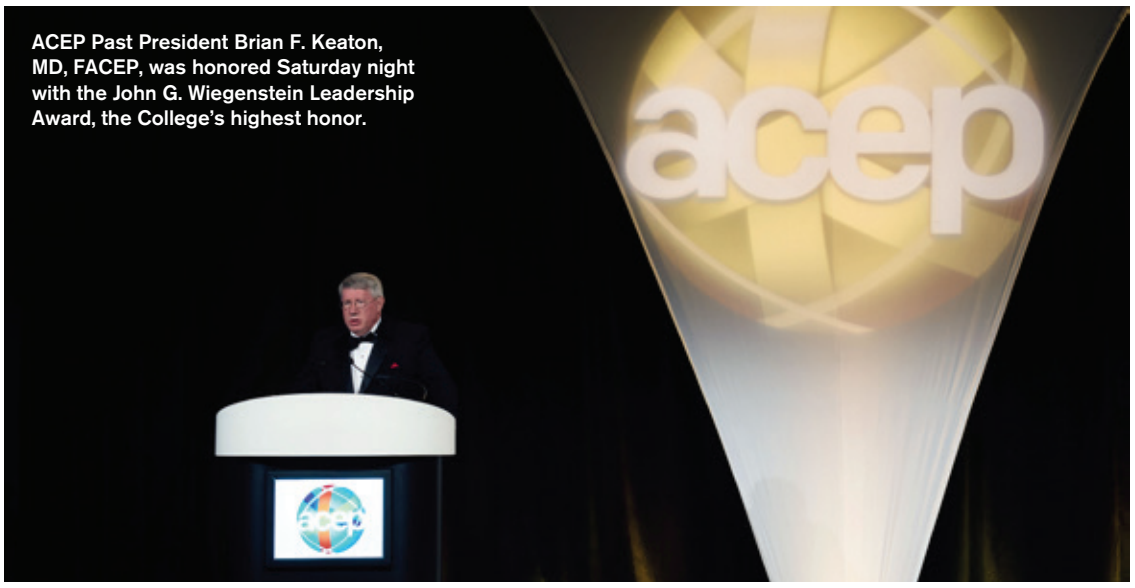
E-QUAL

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 focus areas:

- 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.

Monday, 7 a.m.–6 p.m.;
Tuesday, 7:30 a.m.–5:30 p.m.
Walter E. Washington Convention Center, Level 1, West Salon Foyer



ACEP Past President Brian F. Keaton, MD, FACEP, was honored Saturday night with the John G. Wiegenstein Leadership Award, the College's highest honor.

Partying at the NEW PRESIDENT'S AWARDS GALA

This sold-out red-carpet event featured dinner, dancing, a presentation of the ACEP Leadership Awards, and an elegant welcome for our newest class of FACEP members. Don't miss it next year—and be sure to buy your tickets early!

PHOTOS: PAUL KIM

Don't Miss These innovatED Events

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

MONDAY

Interactive Discussion: Improving Patient-Centric Outcomes with Psychiatric Advance Directives

11–11:30 a.m.

Location: Behavioral and Psychiatric Emergencies Area

Presented by Phyllis Foxworth, advocacy vice president, Depression and Bipolar Support Alliance

Sponsored by Foundation for Advancing Alcohol Responsibility and Advanced Recovery Systems

The mHealth Toolbox Workshop

11 a.m.–12:30 p.m.

Location: mHealth Toolbox Area

Sponsored by mHealth Toolbox

The Hospital Visit

11:15–11:25 a.m.

Location: Innovation Spotlight Theater

A short film by Allergan models the treatment of acute bacterial skin and skin structure infection (ABSSSI).

Sponsored by Allergan

Creating, Implementing, and Sustaining an Atrial Fibrillation Protocol in the Emergency Department

11:30–11:36 a.m.

Location: Innovation Spotlight Theater

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

Relationship Between Workplace Factors and Emergency Physician Well-Being

11:30 a.m.–noon

Location: Steelcase Health Idea Lounge

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

Sponsored by Steelcase Health

Low-Acuity Patient Pod

11:45–11:51 a.m.

Location: Innovation Spotlight Theater

Presented by Dave Vincent, AIA, ACHA, LEED AP, principal and senior vice president, HKS, Inc.

Sponsored by HKS, Inc.

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

Noon–12:30 p.m.

Location: Palliative and Geriatric Care Area

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

Interactive Discussion: The Utility of the Computerized Assessment and Referral System (CARS) Screener for Mental Health Evaluations in the Emergency Setting

Noon–12:30 p.m.

Location: Behavioral and Psychiatric Emergencies Area

Presented by Michael Wilson, MD, PhD, FAAEM, FACEP, assistant professor of emergency medicine; director, emergency medicine behavioral emergencies research lab, University of Arkansas for Medical Sciences, Little Rock

Sponsored by Foundation for Advancing Alcohol Responsibility and Advanced Recovery Systems

Medical Device Pitch Event

Noon–12:30 p.m.

Location: Innovation Spotlight Theater

Featuring four incubatED participants: Adroit Surgical, LLC; Forest Devices; InnoVital Systems; and Multisensor Diagnostics, LLC

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

2:30–3 p.m.

Location: Palliative and Geriatric Care Area

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

Help When You Least Expect It: Peer Support in the ED

2:45–2:51 p.m.

Location: Innovation Spotlight Theater

Presented by Thomas Lane, CRPS, senior director, community and recovery services, Magellan Healthcare

Low-Acuity Patient Pod

3–3:06 p.m.

Location: Innovation Spotlight Theater

Presented by Dave Vincent

Sponsored by HKS, Inc.

Simulation: Pharmacologic Management of Agitation

3–3:30 p.m.

Location: Behavioral and Psychiatric Emergencies Area

Presented by Michael Guttenberg, DO, medical director, Center for Emergency Medical Services, Northwell Health; Kate B. O'Neill, RN, MSN, director of clinical operations, emergency medicine service line, Northwell Health; 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 Advanced Recovery Systems

Are You Ready? Transitions of Care in the Emergency Department and Future Measurement Reporting

3–3:30 p.m.

Location: Steelcase Health Idea Lounge

Presented by Susan Pasley, MS, BSN, RN, clinical product executive

Sponsored by Bravado Health

NarxCare: Analytics and Insights to Address Substance Use Disorder

3:15–3:21 p.m.

Location: Innovation Spotlight Theater

Presented by Jim Huizenga, MD, chief clinical officer, Appriss Health

Sponsored by Appriss Health

NEMPAC CONTRIBUTIONS AND ADVOCACY VITAL FOR HEALTH CARE REFORM

AS IN YEARS PAST, ACEP COUNCIL MEMBERS STEPPED UP TO THE PLATE DURING THE NEMPAC COUNCIL CHALLENGE to ensure that emergency medicine stays at the top of the leaderboard among medical PACs and continues to be a strong, respected voice in Washington, D.C.

Prior to and during the ACEP Council meeting over the weekend, NEMPAC collected more than $300,000 from Council members and ACEP leadership. Combined with thousands of donations this year by ACEP members nationwide, NEMPAC is well on its way to exceeding the $1 million goal set by the ACEP Board of Directors.

ACEP members sent more than 500 messages through Phone-2-Action at the Council meeting and nearly 1,200 at the Opening General Session on Sunday morning. The messages tell Congress that more than 800 ACEP members are coming to Capitol Hill on Wednesday, Nov. 1, to advocate for protections for patients seeking emergency care and federal liability protections for federally mandated care in the emergency department.

NEMPAC serves a vital role in advancing ACEP's legislative agenda and in broadening ACEP's visibility with Congress. NEMPAC's growth has allowed us to be involved in more Congressional races and has expanded our bipartisan influence on Capitol Hill.

With a new President in the White House and a new Congress in on the Hill, the political climate of health care is front-of-mind for all emergency physicians. Now is the perfect time for physicians to demonstrate their commitment to political and grassroots advocacy on behalf of the specialty.

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 FUNDRAISER FOR REP. PAUL RUIZ (D-CA)

MONDAY, 11:30 A.M.
NEMPAC Give-A-Shift Lounge
WCC, Concourse B

NEMPAC is hosting a fundraiser for Rep. Ruiz, the only board-certified emergency physician in Congress. A donation is suggested to attend.

NEMPAC "GIVE-A-SHIFT" DONOR LOUNGE

MONDAY-TUESDAY
8 a.m.–4 p.m.
Washington Convention Center
(by invitation only)

NEMPAC
National Emergency Medicine PAC

Hot Sessions

A Modern Approach to Concussion Diagnosis and Management

by VANESSA CACERES

As the literature on concussions grows exponentially, the annual "Concussion Update" session at the ACEP annual meeting becomes more and more relevant to emergency physicians.

Led by Andrew D. Perron, MD, FACEP, professor and residency program director in the department of emergency medicine at Maine Medical Center in Portland, the session will cover a range of concussion-related topics, including chronic traumatic encephalopathy, brain remodeling, return-to-play guidelines and the connection of concussion to other diseases.

> **"There is more unknown about concussion than known. This frustrates some people."**
> *–Dr. Perron*

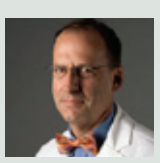
Many of these areas are only beginning to be understood, Dr. Perron said. He wants to caution attendees who may be looking for definitive answers for concussion diagnosis and treatment. "There is more unknown about concussion than known," he said. "This frustrates some people."

The evolving definition of concussion also will be part of Dr. Perron's session. "Concussion is now defined as a complex pathophysiological process affecting the brain and induced by traumatic biomechanical forces. The process can last from hours to weeks," he said. This changes how concussion is potentially managed.

As players in various sports and coaches become more aware of concussions, there also appears to be an increase in the number of diagnoses, Dr. Perron said. That will also be discussed during the session.

"Concussion Update 2017" also will cover modern concussion treatment, as well as concussion and the law.

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



Dr. Perron

CONCUSSION UPDATE 2017: WHAT WE KNOW, WHAT WE THINK WE KNOW, AND WHAT WE DON'T KNOW
Monday, Oct. 30
8–8:25 a.m.
WCC, Ballroom B

Catching Those Life-Threatening ENT Cases

by VANESSA CACERES

Sometimes a sore throat seen in the emergency department is just part of the latest virus going around. Other times, it could be the sign of something life-threatening. If you're seeing multiple patients for run-of-the-mill illnesses, you could miss diagnosing something important in the ears, nose, or throat.

During "Sore Throats That Kill and Other Nightmare ENT Emergencies," Tracy G. Sanson, MD, FACEP, associate professor of emergency medicine at the University of Central Florida College of Medicine in Orlando, will discuss ENT "monsters" that you don't want to miss diagnosing. "We want to increase the potential for getting the diagnosis right," Dr. Sanson said.

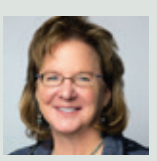
One common error Dr. Sanson will urge attendees to avoid is treating all sore throats (or other ENT maladies) the same way. For example, if it's flu season and everyone is presenting with the same symptoms, you could miss that "snake in the grass" of a more severe problem, she said.

> **"We want to increase the potential for getting the diagnosis right."**
> *–Dr. Sanson*

Dr. Sanson will address how keeping an open mind about an ENT-related diagnosis makes it less likely that you'll miss something important. For example, if you're seeing a patient with a seemingly routine sore throat but their pain seems out of proportion and they have mental status changes, you'll also want to consider other diagnoses, including Lemierre syndrome, which is a significant infection.

Dr. Sanson also will discuss the importance of using proper personal protection during ENT exams and implementing great lighting to help identify subtler findings.

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



Dr. Sanson

SORE THROATS THAT KILL AND OTHER NIGHTMARE ENT EMERGENCIES
Monday, Oct. 30
10–10:25 a.m.
WCC, Ballroom C

Reach for Success with These Five Tips

by RICHARD QUINN

The first rule of being successful is simple to Kerry Broderick, MD, FACEP, of Denver Health.

"You have to show up," said Dr. Broderick, who will present "Top 5 Habits of Highly Successful Emergency Physicians" today. "You have to be present. You can't just say, 'I want to be successful.'"

> **"If you don't reach and say, 'I want to be on that committee,' or work to do that, then you're never going to get there. People aren't just going to hand it to you. You have to reach out … to get success."**
> *–Dr. Broderick*

Success, of course, is different for different physicians. Some might want to just work 12-hour shifts and go home. Others may want to rise to a C-suite position. Still others might want to be actively involved in ACEP.

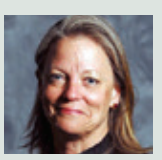
Regardless of your goal, the habits of success remain the same, Dr. Broderick said. Be present. Engage with people actively. Plan for accomplishing your goals.

"This is more about things that you can put into place in your life and you can be successful," she said. "They are the same principles about being present, engaging in the moment of what you're trying to do, making a difference, and reaching, making sure that you reach for what you want, and then reflection."

Reaching for goals is an important note, Dr. Broderick said. People often undersell themselves when a more positive attitude could be the key to success.

"If you don't reach for things, you're never going to get things," she said. "If you don't reach and say, 'I want to be on that committee,' or work to do that, then you're never going to get there. People aren't just going to hand it to you. You have to reach out ... to get success."

RICHARD QUINN is a freelance writer in New Jersey.



Dr. Broderick

TOP 5 HABITS OF HIGHLY SUCCESSFUL EMERGENCY PHYSICIANS
Monday, Oct. 30
10:30–10:55 a.m.
WCC, Ballroom C

Discover Opioid Alternatives and How to Get Paid for Using Them

by KAREN APPOLD

With the country's opioid epidemic continuing to worsen, Alexis M. LaPietra, DO, an emergency physician at St. Joseph's Regional Medical Center in Paterson, New Jersey, will show practitioners how to effectively manage acute and chronic muscular pain without using these highly addictive drugs—and get compensated for it—in "Alternatives to Opioids for Pain Management: Meds, Needles, and Your Hands."

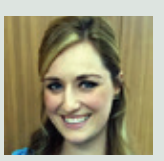
"I will review evidence-based alternative medications and modalities that physicians can easily use in the emergency room," Dr. LaPietra said. In particular, she will discuss multimodal analgesia for musculoskeletal pain, as well as how to perform trigger-point injections and osteopathic manipulative medicine. By also providing billing and coding information, her session will fully equip attendees to start employing the modalities immediately.

> **"An emergency physician's toolbox contains many alternatives; most opioids can be reserved…"**
> *–Dr. LaPietra*

"An emergency physician's toolbox contains many alternatives; most opioids can be reserved as a second-line or rescue medication only," said Dr. LaPietra, who has formal training in pain management. "Opioids are no longer the only option we have to battle pain."

Dr. LaPietra is the founder and chair of the ACEP Pain Management Section, as well as one of the founders of the nationally recognized Alternatives to Opioids (ALTO) Program, which endorses many of the techniques she'll discuss. By implementing this program, her institution decreased opioid use in its emergency department by more than 40 percent in the first three months post-implementation.

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



Dr. LaPietra

ALTERNATIVES TO OPIOIDS FOR PAIN MANAGEMENT: MEDS, NEEDLES, AND YOUR HANDS
Monday, Oct. 30
1–1:25 p.m.
WCC, Ballroom A

New Wellness Center Focuses on the Whole Physician

VARYING FROM PREVIOUS ANNUAL MEETINGS, the ACEP Wellness Center has taken on a new approach this year. Stretching, meditation, and inspirational and though-provoking talks are just a few of the enhancements found 9:30 a.m.–3:30 p.m. Monday and Tuesday in the ACEP Resource Center.

This re-imagined Wellness Center is the result of a year-round commitment from ACEP to physician wellness that shifts the investment of the previous flu shots and blood pressure checks to promote wellness for all members.

The ACEP Board voted last Spring to eliminate the lab testing, as participation had declined significantly and the costs continued to increase. In the past 10 years, lab tests went from 752 participants to just 299 in 2016, despite promotion through multiple communications channels. However, costs for these services continued to increase and the nominal fee charged for the tests did not cover the expense of the service.

Sponsorship opportunities to supplement these costs have had mixed results, and only twice have companies been willing to sponsor the booth in conjunction with a new product that aligns with wellness. Neither renewed.

The Council voted on Saturday to reexamine options for the ACEP Wellness Center services, and the offerings at the annual meeting may continue to evolve.

Additionally, the ACEP Well Being Committee is working on a plan for 2018 that will to move a variety of wellness activities and initiatives outside of the Exhibit Hall and promote wellness throughout the meeting.

Make Every Second Count with Critically Ill Infants

by ART HSIEH

WASHINGTON, D.C.—The first 30 minutes of managing a sick infant in the emergency department consists of identifying and managing airway, breathing, and circulation problems early and aggressively, according to Jennifer D. H. Walthall, MD, FACEP, deputy health commissioner at the Indiana State Department of Health and associate professor of clinical emergency medicine at Indiana University School of Medicine in Indianapolis.

Early identification of critically sick children is essential to effective resuscitation. While emergency physicians are trained to distinguish "sick" from "not sick" in adult patients, pediatric patients present a third category of "could be sick." A fussy but consolable child is a reassuring sight; an infant that is inconsolable, irritated, and not interacting with the environment is a potentially critical situation. Activating a team response early will help set the stage for a successful resuscitation.

Performing noninvasive steps to correct hypoxia, using humidified oxygen and CPAP/BiPAP can help avoid intubation and subsequent chances of ventilator-acquired pneumonia, according to Dr. Walthall. For those who are lethargic or obtunded secondary to respiratory failure, have signs of a lung injury, or can be anticipated to have high metabolic demands (think of severe meningitis, complex congenital heart disease), intubation is indicated.

Cool extremities, capillary refill greater than three seconds, tachycardia, and tachypnea are indications that circulatory support is necessary. Interventions must begin before the child becomes altered or obtunded. Establish two large bore peripheral IVs, using ultrasound-guided insertion techniques if available. Alternatively, inserting a feeding catheter into a neonatal umbilical vein allows fluid resuscitation to begin while establishing peripheral access. Intraosseous placement is also a viable access route. If central venous catheter placement through the femoral route is performed, the leg may turn blue or become swollen despite correct catheter placement.

Fluid rates remain at 20 mL/kg for pediatric patients. For the neonate or for cardiac conditions, 10 mL/kg is appropriate. Fluid therapy is goal directed toward decreasing capillary refill times and improving mental status. Continuing down the treatment tree, Dr. Walthall suggested using peripheral or inhaled routes of administration for vasopressor management. Extracorporeal membrane oxygenation is indicated for shock situations of all types refractory to treatment.

For patients suspected of sepsis, antibiotic treatment should begin by the end of the first 30 minutes of treatment. Corticosteroids should be considered for refractory shock situations. Biomarkers including lactate, C-reactive protein, procalcification, IL-18, and CD-64 should be added to standard lab draws.

Recombinant activated protein C administration has not been identified as a useful tool in managing pediatric patients in refractory shock, and it's unclear what the effects are of nitric oxide. Glycemic control in pediatric patients may not be as critical as in adult patients.

Family-centered care of the sick child is essential to a good management approach, Dr. Walthall stressed. Parents should be able to observe the care being performed by the resuscitation team. A trained nurse, social worker, or chaplain helps to translate what the parents see so they gain a rapid understanding of what's happening to their child. This level of interaction facilitates the communication between the physician and care team with the family, and does not impact outcomes or errors in treatment. "When a child passes away at the end of the resuscitation process, putting my arm around a mom that I have known for that period of time is much better for her, and for me, than walking into a quiet room and introducing myself to a stranger," Dr. Walthall concluded.

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

DON'T MISS THESE EXCITING EXHIBIT HALL EVENTS!

Annals of Emergency Medicine

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

Are you interested in new visual abstracts? See a presentation by *Annals'* social media editor, Seth Trueger, MD, MPH, and one of *Annals'* associate editors, Megan Ranney, MD, MPH, at 11 a.m. on Monday.

Win Prizes Today in the Resource Center

Stop by the ACEP Resource Center daily 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.

ACEP Resource Center
Exhibit Hall
Monday–Tuesday 9:30 a.m.–3:30 p.m.

Adventures Outside the ED: A Wilderness Experience

Exhibit Hall, Booth #1361

How well could you treat a patient outside of your emergency department? Wilderness medicine is an exciting, rapidly evolving field that focuses on the prevention, triage, and initial treatment of acute injuries and illnesses under resource-limited conditions, from recreational outings to expeditions to humanitarian missions. Learn new practical skills, participate in scenarios, meet a legendary figure and author in the field, see new products, and actively challenge yourself on a novel addition to the ACEP experience—a 26-foot climbing wall!

Featured scenarios:

- Snakebite 911
- Cholera, Dizziness at Altitude, and Exertional Heat Illness
- Chest Pain, Multisystem Trauma

Book Signing with Paul Auerbach, MD, MS, FACEP

Monday, 11:30 a.m.–12:30 p.m.

Climbing Wall Operating Hours

Monday–Tuesday, 11:30 a.m.–3:30 p.m.

Sponsored by BTG International Inc., Hydralyte, swyMed, and SAM Medical

DON'T MISS 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 its 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 Monday–Tuesday, 7 a.m.–4 p.m. Capitol, Meeting Level 4, Marriott Marquis

(by invitation only)

EMF donors who have given $600 or more since Jan. 1, 2017, and Wiegenstein Legacy Society members can relax in this private setting with comfortable seating, meals, beverages, and business center amenities.

EMF Silent Auction Monday–Tuesday, 8 a.m.–5 p.m. WCC, Level C, Concourse B

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

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 140 groups in ACEP's 100% Club. If your group is interested in participating in ACEP's Group Recognition Program, please visit the ACEP17 registration area or the Resource Center inside the Exhibit Hall.

ACEP PROUDLY RECOGNIZES THESE GROUPS THAT HAVE ALL ELIGIBLE EMERGENCY PHYSICIANS ENROLLED AS MEMBERS:

100% CLUB
AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

- Albany Medical Center Emergency Physicians
- All Childrens Emergency Center Physicians
- APEX Emergency Group
- Asheboro Emergency Physicians PA
- Athens-Clarke Emergency Specialist
- Augusta Emergency Physicians
- Augusta University
- BlueWater Emergency Partners
- Carson Tahoe Emergency Physicians
- Cascade Emergency Associates
- Cascade Emergency Physicians Incorporated
- Catawba Valley Emergency Physicians-Wake Forest
- Central Coast Emergency Physicians
- Centre Emergency Medical Associates
- Childrens Hospital at Oklahoma University Medical Center Section of Pediatric Emergency Medicine
- Comprehensive Emergency Solutions, SC
- Concord Emergency Medical Associates
- Covenant Health Care
- Doctors Emergency Services Delaware
- East Carolina University
- Eastside Emergency Physicians
- Elkhart Emergency Physicians, Inc.
- EM Medical PC
- Emergency Associates of Yakima
- Emergency Care Consultants PC
- Emergency Care Specialist Incorporated
- Emergency Medical Associates PLLC
- Emergency Medical Associates SW Washington Medical Center
- Emergency Medical Professionals, PA
- Emergency Medical Specialists Colorado Springs
- Emergency Medical Specialists PC
- Emergency Medicine Associates LTD
- Emergency Medicine Associates Philippines Company
- Emergency Medicine of Idaho
- Emergency Medicine Specialists of Orange County
- Emergency Physicians & Consultants
- Emergency Physicians of Central Florida LLP
- Emergency Physicians of Indianapolis
- Emergency Physicians of Tidewater
- Emergency Professional Services PC
- Emergency Resource Management Incorporated
- Emergency Service Associates
- Emergent Medical Associates
- EmergiNet
- Emerson Emergency Physicians LLC
- Emory Department of Emergency Medicine
- EPIC, LLC
- First Contact Medical Specialist
- Flagstaff Emergency Physicians
- Florida Emergency Physicians Kang & Associates
- Florida Regional Emergency Associates
- FrontLine Emergency Care Specialist
- Georgia Emergency Medical Specialist
- Georgia Emergency Physician Specialists LLC
- Glens Falls Hospital ED Physicians
- Grand River Emergency Medical PLC
- Green Country Emergency Physicians
- Hawaii Emergency Physicians Associates Incorporated
- Idaho Emergency Physicians PA
- Indiana University Health Physicians
- Johns Hopkins Medical Institute Faculty
- Lehigh Valley Physicians Group
- LIJ Forest Hills Northwell Emergency Physicians
- Long Island Emergency Medical Care PC
- Long Island Jewish Emergency Physicians
- Long Island Jewish Valley Stream
- Maine Medical Center Emergency Physicians
- Medical Center Emergency Services
- Medical Services of Prescott
- Mercy Hospital Emergency Physicians
- Mercy Medical Center Emergency Medicine Physicians
- Merrimack Valley Emergency Associates
- Mid Atlantic Emergency Medical Associates
- Midland Emergency Room Corporation PC
- Napa Valley Emergency Medical Group
- New York Methodist Hospital Emergency Physicians
- Newport Emergency Medical Group Incorporated
- Newport Emergency Physicians Incorporated
- North Memorial Emergency Physicians
- North Shore Plainview Hospital
- North Shore University Hospital Glen Cove
- North Sound Emergency Medicine
- North West Iowa Emergency Physicians
- Northeast Emergency Medicine Specialists
- Northside Emergency Associates
- Northwell Huntington Hospital
- Northwell LIJ Lennox Hill HealthPlex
- Northwell Southside Hospital
- Northwell University Hospital at Syosset
- Northwell University Hospital EM Physicians of Manhasset
- Orion Emergency Services
- Pacific Emergency Providers APC
- Pediatric Emergency Medicine Faculty at University of Louisville
- Peninsula Emergency Physicians, Inc
- Physician Services of Kansas University
- Preston MD & McMillin MD PC
- Professional Emergency Physicians Incorporated
- Puget Sound Physicians
- Questcare Medical Services
- Raleigh Emergency Medicine Associates
- Rapid City Emergency Services PA
- Rutgers Robert Wood Johnson Medical School Physicians
- Sandhills Emergency Physicians
- Sanford Emergency Department
- Scottsdale Emergency Associates
- Southwest Florida Emergency Physicians
- St. Joseph Hospital Bangor Maine
- Sturdy Memorial Emergency Physicians
- Tacoma Emergency Care Physicians
- Tampa Bay Emergency Physicians
- Texas Tech HSC Faculty EM Physicians
- Tufts Medical Center EP, LLC
- UAB Emergency Medical
- UF Department of Emergency Medicine Group
- UMass Memorial Emergency Medicine
- Unity Emergency Physicians PA
- University Health Associates
- University of Alabama Department of Emergency Medicine South Alabama Physicians
- University of Florida Jacksonville
- University of Louisville Physicians
- University of Mississippi Medical Center Emergency Medicine
- University of Puerto Rico
- University of Virginia Department of Emergency Medicine
- Wake Emergency Physicians PA
- Washington University-Missouri
- Wenatchee Emergency Physicians PC
- Westfield Emergency Physicians

NEW GROUPS THIS YEAR

- Alvarado Emergency Medical Associates Inc.
- Centinela Freeman Emergency Medical Associates
- CEP EM Advocacy Physicians
- Chino Emergency Medical Associates
- College Medical Center Emergency Associates
- Emergency Care Specialists WMI
- Encino Medical Center Emergency Physician Associates
- HealthFront Emergency Physicians
- Henry Ford Hospital Emergency Department
- Hollywood Presbyterian Emergency Medical Associates
- Reno Emergency Physicians
- University of North Carolina Emergency Physicians
- West Hills Emergency Medical Associates Inc.
- White Plains Hospital Emergency Physicians

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

THIS YEAR'S THREE-DAY 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 and interact with researchers during the Wine and Cheese Networking Social on Monday.

Sponsored by GE Healthcare

MONDAY SCHEDULE

For a full listing of presentations, see the ACEP17 mobile app or pages 33–50 in the onsite program. All events take place at the Walter E. Washington Convention Center.

Electronic Presentations

9–9:50 a.m.

- Health Care Policy/Health Services Research Room 154A
- Research Methodology Room 154A
- Education Room 154B
- Toxicology & Pharmacology Room 154B
- Palliative and End-of-Life Care Room 154B
- Infectious Diseases Room 155
- Pediatrics Room 159A
- International/Global Room 159B

10–10:50 a.m.

- Health Care Policy/Health Services Research Room 154A
- Pain Management Room 154B
- Palliative and End-of-Life Care Room 155
- Pediatrics Room 159A
- Psychiatry Room 159B

11–11:50 a.m.

- Health Care Policy/Health Services Research Room 154A
- Basic Science Room 154B
- Geriatrics Room 155
- Pain Management
- Room 154B
- Geriatrics Room 155
- Pediatrics Room 159A
- Public Health Room 159B
- Injury Prevention Room 159B

EMF Showcase Luncheon

Noon–1 p.m.
Room 149AB

State-of-the-Art: The Opioid Crisis: How Government Representatives and Emergency Providers Work Together to Improve Patient Care

1–1:50 p.m.
Room 149AB

Plenary Session 2: New and Noteworthy: Disaster Medical/EMS

2–2:50 p.m.
Room 149AB

Electronic Presentations

3–3:50 p.m.

- Health Care Policy/Health Services Research Room 154A
- Diagnostics Room 154B
- Neurology Room 154B
- Quality and Patient Safety Room 155
- Pediatrics Room 159A
- Trauma Room 159B

4–4:50 p.m.

- Palliative and End-of-Life Care Room 154A
- Neurology Room 154B
- Simulation Room 159A
- Trauma Room 159B
- Quality and Patient Safety Room 155

Wine and Cheese Networking Social

5–6 p.m.
Room 149AB

A RARE EMERGENCY, OR JUST A PAIN IN THE BACK?

by RICHARD QUINN

WASHINGTON, D.C.—Most emergency physicians aren't overly worried about that 62-year-old patient presenting with back pain once they find out the person just started Pilates last week and has no other underlying medical issues. But what about the same patient who presents back pain and a fever in their dialysis treatment on the same day?

Rahul Bhat, MD, FACEP, of MedStar Health in Washington, D.C., said there is no easy answer to non-traumatic back pain, but being in the mindset to at least ask questions about it—even though 95 percent of cases are routine—will help you catch relatively rare diagnoses. "If you play not to lose, then you have to really make sure you pick up that last 5 percent," Dr. Bhat said after his session, "Non-traumatic Back Pain: Reasons Why It Should Tighten Your Sphincter." "If you don't, at some point once every year or two, you're going to have a dangerous diagnosis that you miss."

Dr. Bhat said emergency physicians should pay attention to five main causes of spinal cord compression: infections, hematomas, fractures, tumors, and disc issues. Asking targeted questions about "red flag" risk factors and symptoms can dramatically increase the chances of catching a diagnosis that might otherwise be missed.

But, Dr. Bhat emphasizes, those questions should not be left to rote memorization. Instead, emergency physicians should commit the questions to a checklist or a templated note that ensures all of the necessary questions are asked.

"If you have to memorize them, I don't think anyone is actually going to stick with it," Dr. Bhat said. "But if you have it templated, it probably takes three to five minutes to ask all these questions. And [it's] worth doing it because if you miss it, you're going to be paying a lot more time down the road."

While presentations of nontraumautic back pain rarely lead to paralysis or death, Dr. Bhat said cases that could have more significant outcomes will become a larger part of emergency physicians' duties over time.

"The rate of cord compression that we're going to see is just going to go up," he said. "Because of IV drug abuse, additional medical problems, [an] older population."

RICHARD QUINN is a freelance writer in New Jersey.

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