



HARVARD
MEDICAL SCHOOL

NEUROLOGICAL EMERGENCIES

NOV 9–11
2017
BOSTON, MA

How to rapidly identify high-risk patients and optimize their outcomes

Headaches • Dizziness • Back Pain • Weakness • Coma • Delirium • Seizures • TIA • Concussion

New Algorithms to Accurately Diagnose Common Symptoms and High-Risk Conditions

Updates, Strategies, Best Practices to:

- Avoid misdiagnosis
- Act in the first hours
- Manage coma and delirium
- Diagnose dizziness at the bedside
Is it stroke, neuritis or BPPV?
- Optimize your use of CT, CTA, MRI
When to order. How to read. How to act on results.
- Identify stroke patients for intra-arterial therapy
- Treat stroke, TIA, and intracerebral hemorrhage
- Manage head injuries, from concussion to critical
care management of TBI

Risk Management

How to minimize your liability by optimizing
diagnosis and early management



Full agenda inside

Earn up to 22.50 AMA PRA Category 1 Credits™ and 5.00 Risk Management Credits • CNE: see website

Register at NeuroEmergencies.HMSCME.com

Jonathan A. Edlow, MD and Joshua N. Goldstein, MD, PhD



Beth Israel Deaconess
Medical Center



MASSACHUSETTS
GENERAL HOSPITAL

Course Description

This program prepares clinicians who work in Emergency Medicine, Inpatient/Outpatient Neurology, Critical Care and Trauma, Hospital Medicine, Urgent Care and Internal/Family Medicine to quickly and accurately diagnose and provide appropriate care for patients with neurological emergencies, including:

High-frequency symptoms:

- Headache
- Back pain
- Dizziness
- Delirium
- Weakness

High-risk conditions:

- Ischemic and hemorrhagic stroke
- Subdural hematoma
- TIA
- Spinal cord compression
- Concussion and TBI

Strategies and best practices to:

- Avoid misdiagnosis
- Mitigate risk for you and your patient
- Improve patient safety

Presented by the leading clinical faculty at Harvard Medical School, this course ensures participants are better equipped to make an accurate diagnosis, better understand the uses and limitations of neuroimaging tests, and improve overall care in emergency, inpatient, and outpatient settings.

Learning Objectives

Upon completion of this activity, participants will be able to:

- Perform bedside diagnostic and therapeutic maneuvers in the dizzy patient.
- Use the focused history and physical to determine which patients with headache or minor head injury require neuroimaging or further workup.
- Review history and physical examination “red flags” to avoid misdiagnosis of cord and cauda equina compression in patients presenting with back pain.
- Discuss how to rapidly evaluate patients with stroke symptoms for intravenous and intra-arterial revascularization therapy.

Harvard Medical School Faculty

Imoigele Aisiku, MD
William Copen, MD
Brian L. Edlow, MD
Jonathan A. Edlow, MD
Chris Gilligan, MD, MBA
Joshua N. Goldstein, MD, PhD
M. Edip Gurol, MD, MSc

Maura Kennedy, MD, MPH
Kaarkuzhali Babu Krishnamurthy, MD, MBE
Sandeep Kumar, MD
Thabele (Bay) Leslie-Mazwi, MD
Rebekah Mannix, MD, MPH
Pushpa Narayanaswami, MD, FAAN
MingMing Ning, MD, MMSc

Christopher S. Ogilvy, MD
Efsthathios (Steve) Papavassiliou, MD
David Perez, MD, MMSc
Eric Rosenthal, MD
Martin A. Samuels, MD, DSc (hon), FAAN,
MACP, FRCP, FANA
Martina Stippler, MD, FAANS
Ajith Thomas, MD

Guest Faculty

Suzanne Duni Briggs, JD, RN, BSN, Director, Loss Prevention; Certified Professional Healthcare Risk Manager; Adjunct Faculty, Rhode Island College of Nursing

Lauren M. Nentwich, MD, Director of Quality and Patient Safety, Emergency Department; Assistant Professor of Emergency Medicine, Boston University School of Medicine

David Newman-Toker, MD, PhD, Director, Division of Neuro-Visual & Vestibular Disorders, Department of Neurology; Professor of Neurology, Johns Hopkins School of Medicine

Matthew S. Siket, MD, Assistant Professor of Emergency Medicine, Alpert Medical School of Brown University; Co-Director, Stroke Centers of Rhode Island Hospital and The Miriam Hospital, Providence, RI

Accreditation

ACCREDITATION COUNCIL FOR CONTINUING MEDICAL EDUCATION

The Harvard Medical School is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Harvard Medical School designates this live activity for a maximum of 22.50 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

RISK MANAGEMENT

This activity meets the criteria of the Massachusetts Board of Registration in Medicine for 5.00 credits of Risk Management Study. This includes 1.50 credits in Opioid Education and Pain Management Training and 0.75 credits in Electronic Health Records Training. Please check your individual state licensing board requirements before claiming these credits.

NURSES

This course will be submitted for nursing contact hours. Please check the course website for updates.

CANADIAN ACCREDITATION

The Royal College of Physicians and Surgeons of Canada recognizes conferences and workshops held outside of Canada that are developed by a university, academy, hospital, specialty society or college as accredited group learning activities.

EUROPEAN ACCREDITATION

Through an agreement between the American Medical Association and the European Union of Medical Specialists, physicians may convert *AMA PRA Category 1 Credit™* to an equivalent number of European CME Credits® (ECMECs®). Information on the process of converting *AMA PRA Category 1 Credits™* to ECMECs® can be found at: www.eaccme.eu.

Early registration is strongly advised for this program.



HARVARD MEDICAL SCHOOL

Dear Colleague,

We've all had the experience of seeing the dreaded “dizziness” or “back pain” chief complaint. Every day we go to work, we see patients with these symptoms and others, such as headache and weakness. There is precious little time to sort out which are the needles (patients with life- or limb-threatening emergencies) from the much larger haystack.

Then, once the diagnosis is made, what are the most important next steps? What is the current state of the art for stroke, head injury, and seizure? Do all of these patients need specialty or subspecialty consultation? Which patients benefit from emergency MRI?

If you see patients with potential neurologic emergencies, you know that every year there is more practice-changing literature impacting our approaches to the history, the physical, and early management. How do you stay current with these changes? We designed this course with that question in mind.

Our program summarizes the state-of-the-art, evidence-based workup and management procedures to help frontline providers—including emergency physicians, hospitalists, neurologists, primary care providers and critical care physicians—to find that needle in the haystack, and tells you what to do when you find it. Our program is unique in that it:

- Consolidates best practices in the workup of common neurological complaints.
- Provides tips that you can immediately put into practice.
- Lays out algorithms for common complaints such as headache, dizziness, back pain, and visual problems.
- Delivers guidance for stroke and cerebrovascular episodes, including first hours of workup, the NIH Stroke Scale, tips for rapid neuroimaging and treatment (including new data on intra-arterial therapy), and best practices in risk management.
- Features a cutting-edge program on head injury, from concussion to critical care management of TBI.
- Lets you customize your learning experience to align with your specific practice needs.

You will come away from this experience knowing the evidence-based, state-of-the-art practices that will ensure the best outcomes for your patients.

We look forward to seeing you in November.



Jonathan A. Edlow, MD
Course Director
Vice-Chair, Department of
Emergency Medicine,
Beth Israel Deaconess Medical Center
Professor of Medicine and Emergency
Medicine, Harvard Medical School



Joshua N. Goldstein, MD, PhD
Course Director
Director, Center for Neurologic Emergencies,
Department of Emergency Medicine,
Massachusetts General Hospital
Associate Professor of Emergency Medicine,
Harvard Medical School



Beth Israel Deaconess
Medical Center



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Agenda

Thursday, November 9

Evaluating Common Symptoms

7:30-7:50	Registration and Continental Breakfast
7:50-8:00	Welcome and Introduction Jonathan A. Edlow, MD and Joshua N. Goldstein, MD, PhD
8:00-9:00	Keynote Presentation: Diagnosis of the Comatose Patient Martin A. Samuels, MD, DSc (hon), FAAN, MACP, FRCP, FANA
9:00-9:15	Q&A
9:15-10:00	Optimal Use of Neuroimaging to Answer Clinical Questions William Copen, MD
10:00-10:15	Q&A
10:15-10:45	Determining Causes of Headache: Clinical Clues That Signal Uncommon and Serious Jonathan A. Edlow, MD
10:45-11:00	Q&A
11:00-11:15	<i>Break (refreshments provided)</i>
11:15-11:45	Back Pain: An Algorithmic Approach to Evaluation Jonathan A. Edlow, MD
11:45-12:00	Q&A
12:00-12:30	Acute Management of Spinal Cord/Cauda Equina Injury Efsthathios Papavassiliou, MD
12:30-12:45	Q&A
12:45-1:30	<i>Lunch break*</i>

Your choice of breakout sessions

	Acute ED and ICU Management	Hospitalist and Outpatient Care
1:30-2:00	Delirium in the Elderly	Acute Manifestations of Chronic Neurological Diseases: MS, Parkinson's and MG
2:00-2:15 Q&A	Maura Kennedy, MD, MPH	Pushpa Narayanaswami, MD, FAAN
2:15-2:45	Seizures, Status, and Basic EEG in the Emergency Department and ICU	The Patient Stopped Seizing—Now What? Critical Steps to Take
2:45-3:00 Q&A	Eric Rosenthal, MD	K. Babu Krishnamurthy, MD, MBE
3:00-3:30	CNS Infections	The Pain Consult: ESI, Intrathecal Pumps, Stimulators
3:30-3:45 Q&A	Imoigele Aisiku, MD	Chris Gilligan, MD, MBA
3:45-4:00	<i>Break (refreshments provided)</i>	
4:00-4:30	The Eyes Have It: Practical Bedside Neuro-ophthalmology Jonathan A. Edlow, MD	
4:30-4:45	Q&A	

Program changes/substitutions may be made without notice. To view the most up-to-date version of the course program, please visit the course website.

*Walking distance from numerous restaurants and fast food options.

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Agenda

Friday, November 10

Stroke and TBI

7:30-8:00	Breakfast
8:00-8:45	Keynote Presentation: History and Future Treatment of Cerebral Aneurysms Christopher S. Ogilvy, MD
8:45-9:00	Q&A
9:00-9:30	Updates for Diagnosing Subarachnoid Hemorrhage Jonathan A. Edlow, MD
9:30-9:45	Q&A
9:45-10:15	TIA Work-Up: Where/When/What? Matthew S. Siket, MD
10:15-10:30	Q&A
10:30-10:45	<i>Break (refreshments provided)</i>
10:45-11:15	How to Optimize Stroke Outcomes with IV tPA Lauren M. Nentwich, MD
11:15-11:30	Q&A
11:30-12:00	What's New with Intra-arterial Stroke Therapy Ajith Thomas, MD
12:00-12:15	Q&A
12:15-1:00	<i>Lunch break*</i>

Your choice of breakout sessions

	Acute ED and ICU Management	Hospitalist and Outpatient Care
1:00-1:30	Intracerebral Hemorrhage	Current Approaches to Arterial Dissection
1:30-1:45 Q&A	Joshua N. Goldstein, MD, PhD	Sandeep Kumar, MD
1:45-2:15	Updates for ICU Management of Stroke	Practical Management of PFOs
2:15-2:30 Q&A	Brian L. Edlow, MD	Sandeep Kumar, MD
2:30-3:00	Updates for ICU Management of TBI	Anticoagulants and Antiplatelets: What to Choose and When
3:00-3:15 Q&A	Thabele (Bay) Leslie-Mazwi, MD	M. Edip Guroi, MD, MSc
3:15-3:30	<i>Break (refreshments provided)</i>	
3:30-4:00	Update on Concussion Management: How to Diagnose and How to Treat	
	Rebeka Mannix, MD, MPH	
4:00-4:15	Q&A	
4:15-4:45	Subdural Hematoma: State-of-the-Art Approaches to Emergency Management	
	Martina Stippler, MD, FAANS	
4:45-5:00	Q&A	

WHO ATTENDS

Physicians, NPs, PAs, Nurses and other practitioners in the fields of:

- Emergency Medicine
- Critical Care
- Trauma
- Internal Medicine
- Neurology
- Hospital Medicine
- Urgent Care
- Family Medicine



Agenda

Saturday, November 11

Avoiding Misdiagnosis, Optimizing Patient Safety, and Improving Risk Management

7:30-8:00	Breakfast
8:00-9:00	Keynote Presentation: Avoiding Misdiagnosis in Neurologic Emergencies David Newman-Toker, MD, PhD
9:00-9:15	Q&A
9:15-9:45	Stroke Chameleons: Strokes That Don't Look Like Strokes MingMing Ning, MD, MMSc
9:45-10:00	Q&A
10:00-10:15	<i>Break (refreshments provided)</i>
10:15-11:00	Diagnosing Dizziness: A New, Improved Paradigm Jonathan A. Edlow, MD
11:00-11:15	Q&A
11:15-11:45	Functional (Psychogenic) Neurological Disorders in the Acute Setting: Assessment and Early Management David Perez, MD, MMSc
11:45-12:00	Q&A
12:00-1:00	<i>Lunch break*</i>
1:00-1:45	Acute Neurological Emergencies in Pregnant and Postpartum Patients Jonathan A. Edlow, MD
1:45-2:00	Q&A
2:00-2:30	Documentation: How to Bulletproof Your Chart Jonathan A. Edlow, MD
2:30-2:45	Q&A
2:45-3:15	What Lawyers Want: Malpractice and You Suzanne Duni Briggs, JD, RN, BSN
3:15-3:30	Q&A
3:30-4:15	Case Discussions: Actual Closed Malpractice Cases Joshua N. Goldstein, MD, PhD, Jonathan A. Edlow, MD, Suzanne Duni Briggs, JD, RN, BSN
4:15-4:30	Closing Remarks

Reasons to Attend

Algorithms and State-of-the-Art Practices to:

- Evaluate symptoms and high-risk conditions
- Avoid misdiagnosis
- Act in the first hours
- Manage coma and delirium
- Diagnose dizziness at the bedside
- Identify stroke vs. neuritis vs. BPPV
- Optimize your use of CT, CTA, MRI
- Improve patient outcomes
- Identify stroke patients for intra-arterial therapy
- Treat stroke, TIA, and intracerebral hemorrhage
- Manage head injuries, from concussion to critical care management of TBI

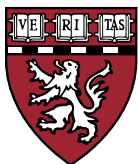
Customize Your Learning Experience

Choose from among 12 breakout sessions to tailor your learning experience to your particular practice needs.

NEW in 2017

New in 2017 is dedicated education to:

- Avoid misdiagnosis
- Improve risk management
- Optimize patient safety
- Better understand and mitigate liability



HARVARD MEDICAL SCHOOL

Neurological Emergencies Course #734470-1801	After September 30, 2017	Register on or before September 30, 2017
Course Tuition	\$995	\$895 (Save \$100)

Tuition includes continental breakfast each day, and morning and afternoon refreshment breaks. All attendees will receive a flash drive containing course materials.

Registration, Payment, Confirmation and Refund Policy

Registrations for Harvard Medical School CME programs are made via our secure online registration system. To register for this course, please visit the course website at NeuroEmergencies.HMSCME.com.

At the end of the registration process, a \$5 non-refundable processing fee will be added to your registration, and you will have the choice of paying by check or credit card (Visa, MasterCard, or American Express). If you are paying by check (draft on a United States bank), the online registration system will provide you with instructions and a printable form for remitting your course fees by check. Postal, telephone, fax, and cash-payment registrations are not accepted. All fees shown in USD.

Upon receipt of your paid registration, an email confirmation from the HMS GCE office will be sent to you. Be sure to include an email address that you check frequently. Your email address is used for critical information, including registration confirmation, evaluation, and certificate. Refunds, less an administrative fee of \$75, will be issued for all cancellations received two weeks prior to the start of the course. Refund requests must be received by email. No refund will be issued should cancellation occur less than two weeks prior. "No shows" are subject to the full course fee and no refunds will be issued once the conference has started.



Venue

Fairmont Copley Plaza
138 St. James Avenue
Boston, Massachusetts
+1 617-267-5300

Accommodations

A limited number of rooms have been reserved at Fairmont Copley Plaza until October 16, 2017. When calling the hotel, be sure to specify that you are enrolled in this activity to receive a reduced room rate. Discounted hotel arrangements can also be made online before October 16 by visiting the course website and clicking on the dedicated link on the Venue page.

Please do not make non-refundable travel arrangements until you have received an email from our office confirming your paid registration.

Questions? Call 617-384-8600 Monday-Friday 9am – 5pm (ET) or send email to CEPrograms@hms.harvard.edu

Register at NeuroEmergencies.HMSCME.com