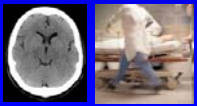



MEMC Session

**Continuing Medical Education
for Emergency Physicians:
The FERNE Experience**



Edward P. Sloan, MD, MPH, FACEP



2009 MEMC V Meeting

Medical Education Track



Valencia, Spain
17 September 2009

Edward P. Sloan, MD, MPH, FACEP




Edward P. Sloan, MD, MPH

Professor

**Department of Emergency Medicine
University of Illinois at Chicago
Chicago, Illinois**

Edward P. Sloan, MD, MPH, FACEP




**Attending Physician
Emergency Medicine**

**University of Illinois Hospital
Swedish American Belvidere Hospital**

Chicago, IL


Edward P. Sloan, MD, MPH, FACEP



Disclosures

- FERNE Chairman and President
- FERNE grants by industry
- Participation on industry-sponsored advisory boards and as lecturer in programs supported by industry
- ACEP Clinical Policy Committee
- 2009 MEMC Educational activities supported by an Educational Grant from Alexza Pharmaceuticals


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Overview

- High quality continuing medical education is essential
- It enhances emergency care and improves patient outcomes
- The educational work is highly gratifying and is recommended
- The administrative burdens are great, not for the faint of heart
- The work can be done with relative ease

Edward P. Sloan, MD, MPH





Overview

Foundation History & Development

- Industry grant, endowment in 1997
- Planned work for 1-2 years
- Additional program grants from industry
- Work over 11 years
- 501-C3 Foundation
- Free standing finances
- Technical and academic support thru UIC

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Overview

Mission Statement Preamble

The Foundation for the Education and Research in Neurological Emergencies is an independent not-for-profit organization committed to the following principles:

Edward P. Sloan, MD, MPH, FACEP

Overview

Mission Statement Principles

- Patients with neurologic emergencies deserve quality emergency care.
- The emergency care for neurologic emergencies can be enhanced through quality scientific research.
- Emergency medical care providers can provide optimal medical care for patients with neurological emergencies through participation in quality medical education that highlights state-of-the-art neurologic care.

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Administrative

Industry Collaborators

Abbott Laboratories	Genentech
Adam Williams Initiative	GTE
Alexza Pharmaceuticals	Janssen Pharmaceutical
AstraZeneca	Novo Nordisk, Inc.
Boston Scientific	The Medicines Company
Bristol Myers Squibb	Ortho-McNeil Pharmaceutical, Inc.
Concentric Medical	Parke-Davis
Eisai Inc.	Pfizer
EB Medicine	Roche Pharmaceutical
EKR Therapeutics, Inc.	UCB Pharma, Inc.
EMA	

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Administrative

Academic Collaborations

- American Academy of Emergency Medicine (AAEM)
- American Stroke Association (ASA)
- American College of Emergency Physicians (ACEP)
- Emergency Medicine Foundation (EMF)
- Emergency Medicine Residents' Association (EMRA)
- European Society for Emergency Medicine (EuSEM)
- Illinois College of Emergency Physicians (ICEP)
- International Brain Injury Association (IBIA)
- Mount Sinai School of Medicine, NY (MSSM)
- National Institute of Neurological Disorders and Stroke (NINDS)
- Resuscitative Hypothermia Academic Industry Roundtable (RHAIR)
- Society for Academic Emergency Medicine (SAEM)

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Administrative

Board Chairman and President

Edward P. Sloan, MD, MPH, FACEP

Professor
Department of Emergency Medicine,
University of Illinois School of Medicine



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Our Lady of the Resurrection Hospital, Chicago

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Administrative

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Medical Director
Department of Emergency Medicine,
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Associate Professor
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Attending Physician
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Department of Emergency Medicine
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Mayo Medical School
Rochester, Minnesota



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Division of Emergency Medicine
Mayo Clinic, Jacksonville

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Director, Emergency Stroke Program
University of California Los Angeles
Los Angeles California

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Associate Professor of Emergency Medicine
University of Illinois
Chicago, IL




Jonathan Edlow, MD

Associate Professor of Emergency Medicine
Beth Israel Hospital
Boston, MA



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Administrative

Extended Advisory Board

30 Members
Emergency Medicine Physicians
Provides input regarding needs and future directions
Advisory board last convened May 2004
Insights into FERNE priorities and educational needs

Edward P. Sloan, MD, MPH, FACEP




Education

Case-based Learning

- Uniform content
- Case presentation
- Key Learning Points
- Introduction, discussion of the clinical disease state
- Optimal ED management strategies
- Patient outcome
- References
- Annotated bibliography
- Questions and answers


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Education

CME

CME available through the
EB Medicine (ebmedicine.net)
Available for all FERNE educational meetings
Free for all course attendees



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EMERGENCY MEDICINE PRACTICE
EBMEDICINE.NET
AN EVIDENCE-BASED APPROACH TO EMERGENCY MEDICINE

October 2006
Volume 8, Number 10

The Swollen Extremity: A Systematic Approach To The Evaluation Of A Common Complaint

Authors
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Attending Physician, Emergency Medicine (Clinical Pediatrics), Assistant Clinical Professor, Weill Medical College of Cornell University, Lincoln Medical & Mental Health Center, Bronx, NY.
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Assistant Professor, Division of Emergency Medicine, Division of Critical Care, Director of Emergency Critical Care, UMDNJ-University Hospital, Scotch Plains, NJ.
Nicholas Genes, MD, PhD

It is another busy night in the emergency department; five admitted patients are waiting for beds and three patients are waiting for CT scans. Space and resources are limited. Your next patient is an obese, 35-year-old, female visitor from Australia with no known medical problems. She tells you that she never comes to the emergency room, but decided to come in tonight because the pain in her right leg was keeping her awake. She has had mild to moderate pain in both knees "for a long time," but for the last two days her right lower leg has been progressively painful and swollen. She has been staying off her feet and taking ibuprofen, but the pain and swelling are not getting better. She also complains of a mild discomfort in her chest which she can not characterize. Her blood pressure is 140/90 mmHg, pulse is 100, respiratory rate is 20, temperature is 37.2°C, and her

PEDIATRIC EMERGENCY MEDICINE PRACTICE
AN EVIDENCE-BASED APPROACH TO PEDIATRIC EMERGENCY MEDICINE ■ EBMEDICINE.NET

July 2007
Volume 4, Number 7

Fever Caused By Occult Infections In The 3-To-36-Month-Old Child

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Martin L. Herman, MD, FAAP, FACEP
Professor of Pediatrics, Division of Critical Care and Emergency Services, UT Health Sciences School of Medicine, Cordova, TN

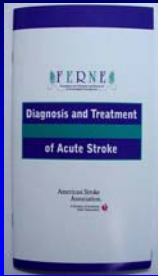
It's 3 am and the ED is winding down. You look up to find that the next patient to be seen is a 9-month-old with the chief complaint of "fever." You stieg down the last of your lukewarm coffee, grab the chart, and head off to room 5. On entering, you find a teary-eyed white female infant sitting in her mother's lap, eyeing you suspiciously. Mom relates that she has been ill for the past three days with upper respiratory congestion and a nonproductive cough, which her mom has been treating with an over-the-counter decongestant. Today, however, the child was less active, drank less of her formula than usual, and felt hot to the touch, prompting Mom to check her temperature. Her initial fever of 101.2°F responded to a dose of acetaminophen, but when the mother rechecked the child's temperature several hours later, it had climbed to 103.5°F, so she called her pediatrician's answering service and was told to bring her immediately to the emergency department. The young girl has had two episodes of nonbloody, nonbilious emesis related to her cough, no diarrhea or rash, and has maintained her urinary output. She has

Education


Other Educational Materials

Acute Stroke Materials

- Developed a Handbook and Companion CD Rom
- Published Spring 2004
- Collaboration included American Stroke Association and France Foundation



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Education

Supplements

Planned Seizure Publication

Emergency Medicine Clinics 2010
Comprehensive state-of-the-art Seizure Data
15 Manuscripts total

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Education

Meeting Attendance and Evaluations


82 FERNE meetings
~ 460 Educational Lectures, 14 Research Lectures
~ 188 Speakers
~ 5,850 physicians in attendance
~ 11,000 contact hours
Evaluated as excellent or good by 97% of learners

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Education

Web-based Learning: Website



www.ferne.org


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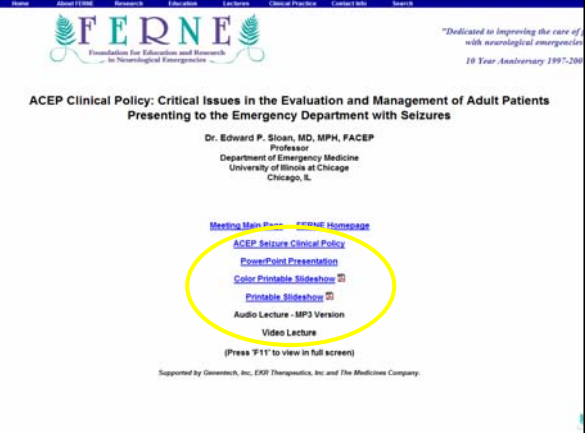

Education

Web-based Learning: EMedHome.com


- FERNE generated content
- CME can be obtained via EMedHome website
- Slides and audio



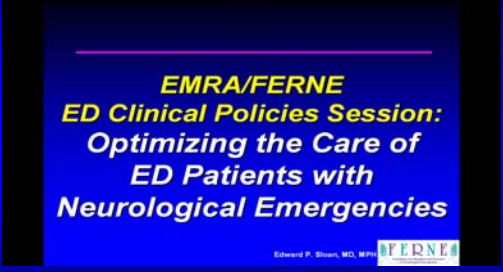
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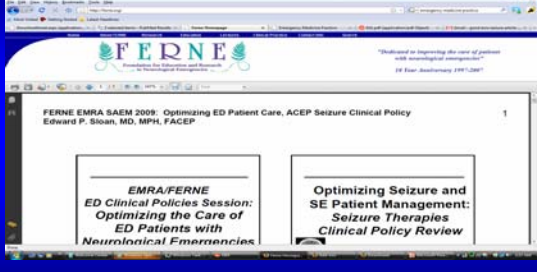
PPS For Viewing




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PPT Handout for Printing



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Color PPT Handout for Printing

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Education

Web-based Learning: Video Slideshows

- Audio, video and slide content
- Able to access individual slides, specific content
- MS Producer, viewable with Windows Media Player

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Education

Web-based Learning: Slide Lectures

Download or view online

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Education

Handheld Software: HandiStroke Rx

HANDi Stroke Rx Available free from www.ferne.org

- Written at Mount Sinai, New York
- Funded by a FERNE grant
- NIH Stroke Scale
- tPA Inclusion/Exclusion criteria
- tPA dosage calculator
- Continuation of care orders

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Education

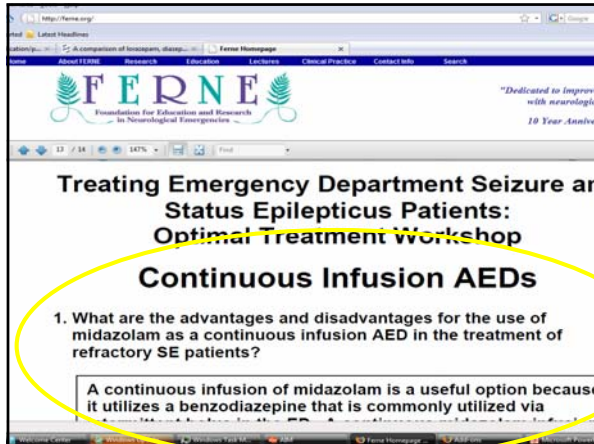
Handheld Software: SeizureStat©

SeizureStat© Available free from www.ferne.org

- Written at University of Illinois, Chicago
- Funded by FERNE
- Written materials
- Urgent SE protocol
- Information on 10 urgent meds

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Developed with Unrestricted Educational Grant Support From Abbott Laboratories and UCB Pharma, Inc.



Research

Directed Neurological Emergencies Research Grant

- Up to \$ 50,000 per Grant
- \$300,000 awarded with EMF support
- Promotes new knowledge relating to the diagnosis and management of neurological emergencies in the medical community
- Directed to researchers in established emergency medicine research program
- One directed research grant per institution, per cycle, is awarded

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Research

Directed Neurological Emergencies Research Grant

- Christopher Barton, MD
- UCSF
- Emergency Department Assessment of Secondary Brain Insults in ICH
- Jane Brice, MD, MPH
- UCSF
- Stat 911: Stroke Assessment Tool for 911

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Research

Directed Neurological Emergencies Research Grant

- Andrew W. Asimos, MD
- Carolinas Medical Center
- A Prospective Validation Study of the ABCD Score and Kaiser Criteria for Short-term Stroke Risk after ED Diagnosis of TIA
- Michael Ross, MD
- William Beaumont Hospital Research Institute
- The Emergency Department Transient Ischemic Attack Accelerated Diagnostic Protocol

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Research

Seed Grants / Unsolicited Proposals

- Up to \$5,000 grants, \$25,000 total
- Promote new research
- Help secure future funding
- Identify the support source
- Specific area of interest
- Available for all EM practitioners

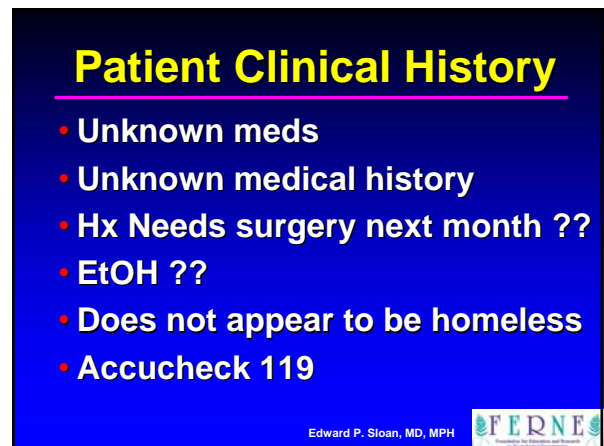
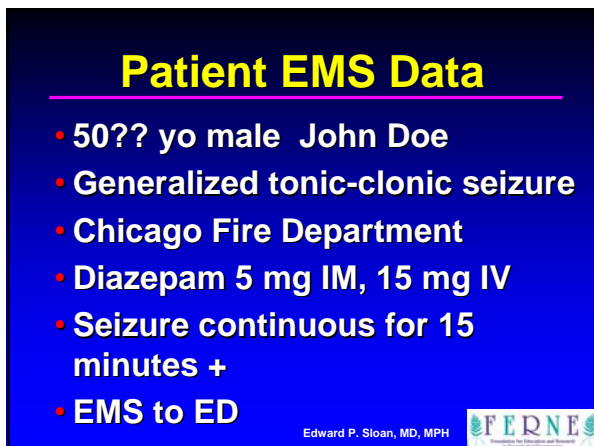
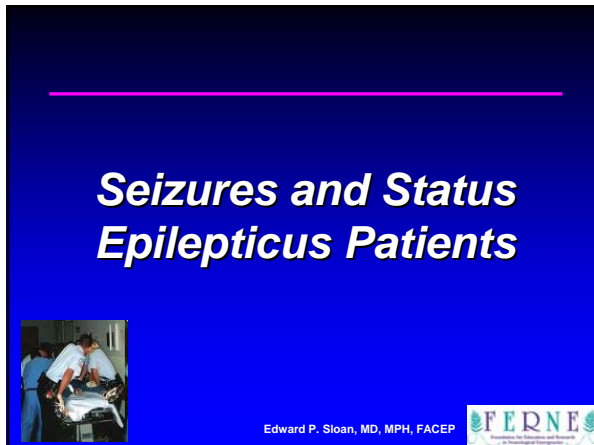
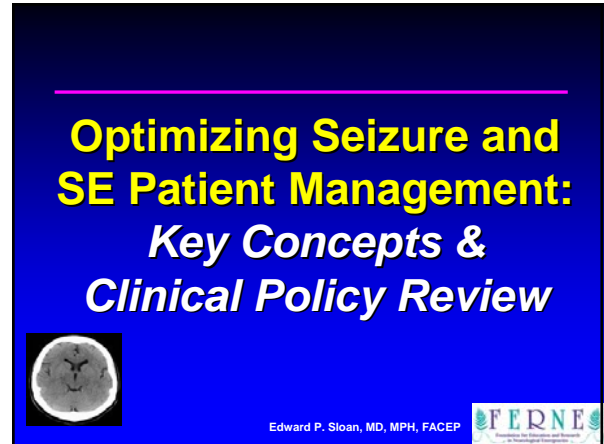
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Opportunities For Involvement

How You Can Become Involved

- Development of new cases
- Become a speaker
- Tell us about your preferred:
 - Symposia, content, venues
 - Learning methods
 - Research grants
- Develop technology based applications
- Contact us: ferne@ferne.org


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ED Presentation

- Facial and shoulder twitching R
- Pt with gurgling BS
- Nasopharyngeal airway
- No evidence of trauma or toxicity
- IV access in neck
- Seizure x minutes

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Clinical Policy: Critical Issues in the Evaluation and Management of Adult Patients Presenting to the Emergency Department With Seizures

Policy statements and clinical policies are the official policies of the American College of Emergency Physicians and, as such, are not subject to the same peer review process as articles appearing in the journal. Policy statements and clinical policies of ACEP do not necessarily reflect the policies and beliefs of journals of Emergency Medicine and its editors.

This clinical policy was developed by the ACEP Clinical Policies Committee and the Clinical Policies Subcommittee on Seizures. For a complete list of authors, committee and co-authors, visit www.acep.org.

This clinical policy focuses on critical issues in the evaluation and management of adult patients with seizures. The medical literature was reviewed for articles that pertained to the critical questions posed. Subcommittee members and expert peer reviewers also supplied articles with direct bearing on this policy. This clinical policy focuses on 6 critical questions:


- I. What laboratory tests are indicated in the otherwise healthy adult patient with a new-onset seizure who has returned to a baseline normal neurologic status?
- II. Which new-onset seizure patients who have returned to a normal baseline require a head computed tomography (CT) scan in the emergency department (ED)?
- III. Which new-onset seizure patients who have returned to normal baseline need to be admitted to the hospital and/or started on an antiepileptic drug?
- IV. What are effective phenytoin or fosphenytoin dosing strategies for preventing seizure recurrence in patients who present to the ED after having had a seizure with a subtherapeutic serum phenytoin level?

605 (1 of 21)

New Onset Sz: Dispo/AED Use

- Which new onset seizure patients who have returned to normal baseline need to be admitted to the hospital and / or started on an AED?
- (Outcome measure: short term morbidity or mortality)


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New Onset Sz: Dispo/AED Use

- Level C recommendations:
 - Patients with a normal neurological examination can be discharged from the ED with outpatient follow-up
 - Patients with a normal neurological examination and no co-morbidities and no known structural brain disease do not need to be started on an anti-epileptic drug in the ED


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Sz/SE: Phenytoin Loading

- What are effective phenytoin dosing strategies for preventing seizure recurrence in patients who present to the ED with a sub-therapeutic serum phenytoin level?
- (Outcome measure: short term
 - seizure recurrence)


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Sz/SE: Phenytoin Loading

- Level C recommendation:
 - Administer an intravenous or oral loading dose of phenytoin or intravenous or intramuscular fosphenytoin, and restart daily oral maintenance dosing.

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Sz/SE SE Therapeutics

- What agent(s) should be administered to a patient in status who continues to seize despite a loading dose of a benzodiazepine and a phenytoin?
- (Outcome measure: cessation of
 - motor activity)

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Sz/SE SE Therapeutics

- Level C recommendation:
 - Administer one of the following agents intravenously: “high-dose phenytoin,” phenobarbital, valproic acid, midazolam infusion, pentobarbital infusion, or propofol infusion.

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Sz/SE: EEG Monitoring

- When should an EEG be performed in the ED?

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Sz/SE: EEG Monitoring

- Level C recommendation:
 - Consider an emergent EEG for patients suspected of being in non-convulsive SE or in subtle convulsive SE, for patients who have received a long-acting paralytic, or for patients who are in a drug-induced coma.

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ED Patient Outcome

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ED Patient Management

- Lorazepam 2 mg IVP x 5 over 10 minutes
- Persistent facial and R shoulder activity
- AMS: generalized seizure continues
- Fosphenytoin 1 gram PE over 10 min x 2
- Seizure ended, pt remained obtunded
- Intubation immediately followed
- Lidocaine, sux, rocuronium

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ED Diagnostic Evaluation

- Non-contrast CT: Prior strokes, atrophy
- Metabolic tests normal
- Toxicology screening negative
- Phenytoin level cancelled
- Diagnoses:
 - AMS
 - Status Epilepticus
 - Respiratory Failure

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Family Arrives, Pt History

- Pt with history refractory seizures
- Hx carotid artery occlusion R
- Due for carotid endarterectomy
- Phenobarbital & dilantin, compliant
- Prior history of SE treated at UIC
- No recent illness, trauma, EtOH
- No medic alert bracelet

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Patient Outcome

- EEG in ED, within 150 minutes
- Neuro consultation, no subtle SE
- Admit to Neuro ICU
- Repeated doses of rocuronium
- Final disposition for carotid Rx

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Overview

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Administrative Burdens

- Finances
- Academic department
- CME
- Foundation
- Grantsmanship
- Staff
- Technical issues

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Getting the Work Done

- Finances
- Academic department
- CME
- Foundation
- Grantsmanship
- Staff
- Technical issues

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Finances

- Hire a good part-time administrator
- Keep meticulous records
- Be facile with budgeting and Excel
- Be above board on everything
- Be lean and mean
- Look forward at all times
- Use the funds to create content

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Academic Department

- Give the department credit
- Use only your space as able
- Minimize costs
- Be ready to pay for non-clinical time
- Build department support into grants
- Clear the activity with dean, university
- Consider foundation within university

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CME

- Find a provider in the business
- Trade content for CME as able
- Have an ongoing means of providing a needs assessment
- Follow-up required (survey monkey)
- Always make your content CME based
- Never sell anything
- Be ready to pay for CME as needed

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Foundation

- Government requirements
- Audit requirements
- Paperwork
- Must use funds to pay for mission
- Must continue to raise funds
- Live on the verge of bankruptcy
- Grant to others thru another agency

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Grantmanship

- You are being granted a grant to talk about the clinical area, not the product
- Expect a non-continuous grant stream
- Include a needs assessment
- Specify the deliverables
- Have a budget that is general and specific
- Executive summary, cover letter
- Include your history, identify strengths
- Explain why the work is important

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Grantmanship

- Identify the content, expect change
- Recognize grantors
- Supporting agencies that support you
- Funds follow the CME provider
- University issues
- Budget reconciliation
- Put administrative time into the grant

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Staffing

- People are people
- Full time staffing cannot be supported
- Student staffing
- Working with young people
- Keeping one step ahead
- Independent contractor vs. employee
- Ed's rule

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Ed's Rule(s)

- Don't ask anyone to do anything that you cannot or have not done yourself
- If you have not or cannot do the work, learn how to do it from your students
- Make sure staff knows that you are able to do the work

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Technical Issues

- Recording
- Processing for the Internet
- Computers
- Storage
- Website
- Server, name
- Software

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Meeting Content

- Templates
- President's letter
- CME request form
- Evaluation form
- Folders
- CDs
- Posters
- Sign-in sheets

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At the Meeting

- Good suit cases
- Carry-on that carries technology
- At least one extra support person
- Be comfortable with uncertainty
- Be fast with your technology
- Standing room only is good
- Start on time, end on time
- Be ready for questions

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Conclusions

- Educate
- Provide CME if is a part of some greater mission or activity
- Use technology to break down space and time barriers
- Develop compelling, relevant content
- Enjoy the process!!

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By the Way...

- Getting Internet screen images into a PowerPoint presentation...
- Shift & Prnt Scrn
- Edit Paste into a text box
- Adjust the size
- Circle the relevant items
- Educate
- Improve patient care

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Questions?

www.FERNE.org

edsloan@uic.edu

ferne_memc_2009_sloan_cme_091709_final
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Edward P. Sloan, MD, MPH, FACEP



