Annual Course: Managing Common Complex Symptomatic Epilepsies: Tumors and Trauma

December 2, 2012

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American Epilepsy Society  |  Annual Meeting
How To Vote via Texting

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1. Text a **CODE** to **37607**
   - Amazing: **458456**
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   - It's Alright: **458472**

**TIPS**

1. Standard texting rates only (worst case US $0.20)
2. We have no access to your phone number
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EXAMPLE

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Disclosure

Eisai, MAP, Vertex, Upsher-Smith, Lundbeck, UCB, Neuropace, NIH

Research Grants
Annual Course Overview

• Trauma and Tumors are common causes of lesional epilepsy.
• Both TBI and brain tumors are overrepresented in newly diagnosed patients.
• Chronic seizures are the most cited problematic complication to either of these conditions.
• Models for learning and preventing epileptogenesis.
Annual Course: Learning Objectives

• Utilize Algorithms that describe how to best manage patients with epilepsy related to brain tumors including novel intraoperative monitoring techniques
• Use an evidence based algorithm for management of the patient with posttraumatic epilepsy
• Risk Analyses will be performed in making treatment decisions regarding prophylactic use of AEDs in patients with CNS tumors
• Manage Patients with metastatic brain tumors with treatment options based on evidence-based best practices
Annual Course Overview

• Two sessions: Tumor and Trauma
• Each session framed by clinical cases involving both adults and children
• Through, lectures, debates and panel sessions, clinical management will be highlighted while illuminating basic science and practice gaps.
• Each session will conclude with a summary and an algorithm for management.
Disclosure

None
16 Year-old Right Handed Female

- No seizure risk factor
- Single seizure semiology since age 11 years
  - Increased heart rate or sensation of intense anxiety
  - Stereotypic complex visual black / white hallucinations
    - Little people dancing around a giant
    - Herself sitting on a rock
  - Preserved speech
  - 30 seconds
Age 11 years

• MRI brain showed right ‘mesial temporal sclerosis’
• Short-term EEG repeatedly normal
• Prolonged video EEG
  – Single event of "funny feeling /panic sensation”
  – Two to 3-Hz delta activity at T4 for ten seconds
• Management
  – Carbamazepine and topiramate
  – Seizure free for 2 years
Seizure Recurrence

• Age 13 Years
  – Off medication for 4 months before recurrence
  – Same semiology
  – MRI brain showed ‘right temporal cortical dysplasia’

• Ages 14-16 years
  – Weekly seizures despite additional medication trials
  – Neuropsychometric testing
    • Verbal memory intact
    • Verbal / nonverbal skills normal
Age 11 years
T1 with gadolinium
FLAIR

Age 13 years
T1 with gadolinium
FLAIR

Faint gadolinium enhancement in the anteromedial right temporal lobe
16 Year-old Right Handed Female
Intervention

- Right temporal lobectomy and amygdalohippocampectomy
- Pathology:
  - Angiocentric glioma WHO Grade I
- Gross total resection on follow-up MRI
- Medication withdrawal at 3 month
- Seizure free off medication at 15 months