

# Infantile Spasms

A devastating condition in dire  
need of more treatments

Eric H. Kossoff, MD

Assistant Professor, Neurology and Pediatrics

John M. Freeman Pediatric Epilepsy Center

Johns Hopkins Hospital

January 8, 2009

# Child Neurology Society



- Founded 1973
- Located in St. Paul, Minnesota
- Organization representing 1533 child neurologists in the United States and Canada primarily

# Infantile Spasms

- Affects 1 in 2,000 infants
  - One new case every 2 months at Johns Hopkins Hospital
- Infants present with the abrupt onset of up to hundreds of stiffening seizures per day
- 70-80% due to an underlying cause
- 80% have developmental delay
  - Some evidence exists for early intervention (<1 month) being protective

CME

## **Practice Parameter: Medical Treatment of Infantile Spasms**

**Report of the American Academy of Neurology and the  
Child Neurology Society**

M.T. Mackay, MBBS; S.K. Weiss, MD; T. Adams-Webber, MLS; S. Ashwal, MD; D. Stephens, MSc;  
K. Ballaban-Gill, MD; T.Z. Baram, MD, PhD; M. Duchowny, MD; D. Hirtz, MD; J.M. Pellock, MD;  
W.D. Shields, MD; S. Shinnar, MD, PhD; E. Wyllie, MD; and O.C. Snead III, MD

- ACTH is “probably” effective
- Vigabatrin is “possibly” effective
- “Insufficient” evidence for any other treatments

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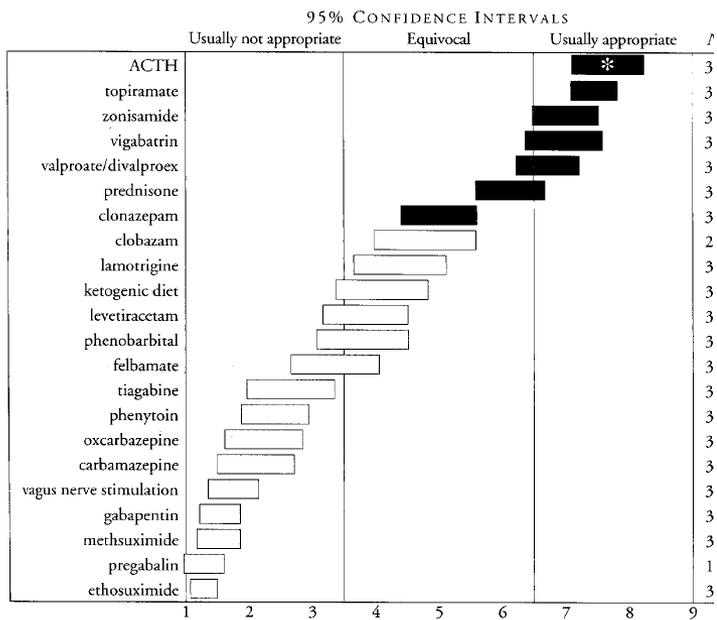
- Active, not recruiting** [A Randomized, Controlled Trial of Ganaxolone in Patients With Infantile Spasms](#)  
Condition: Infantile Spasms  
Intervention: Drug: Ganaxolone
- Active, not recruiting** [Open-Label Extension to Protocol 1042-0500](#)  
Condition: Infantile Spasms  
Intervention: Drug: Ganaxolone
- Completed** [Phase II Randomized Study of Early Surgery Vs Multiple Sequential Antiepileptic Drug Therapy for Infantile Spasms Refractory to Standard Treatment](#)  
Conditions: Spasms, Infantile, Epilepsy  
Interventions: Drug: carbamazepine; Drug: corticotropin; Drug: nitrazepam; Drug: pyridoxine; Drug: valproic acid; Procedure: Surgery

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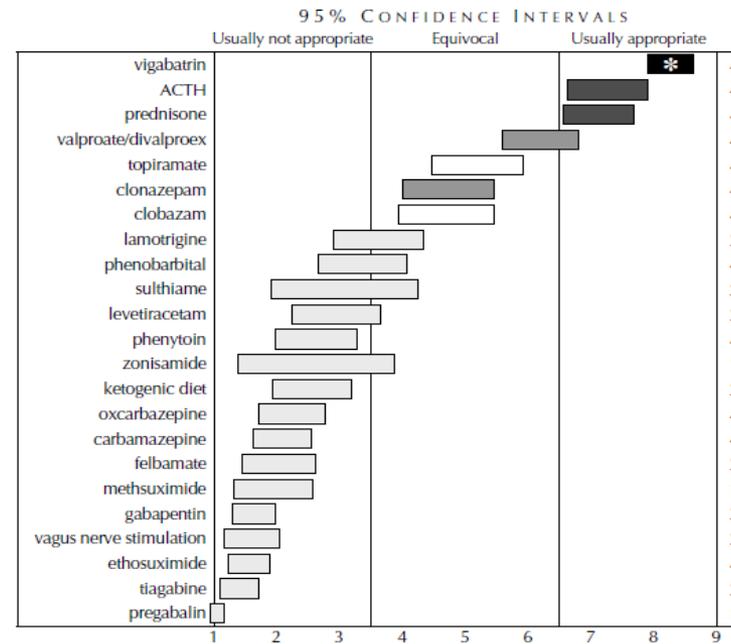
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# Vigabatrin

- A novel anticonvulsant with reported benefits for infantile spasms
- Widely used outside the United States
- Primary use: infantile spasms



USA Experts Opinion



European Experts Opinion

# Vigabatrin: 2009

- Child neurologists interested in exploring its benefits as well as risks
- 809 human research studies in PubMed
  - Several studies comparing vs. steroids and reporting benefits for tuberous sclerosis
  - UK study (ICISS) underway – steroids alone vs. steroids in combination with vigabatrin
  - Recent identification of T2-bright MRI abnormalities
  - Continued visual field data

# Child Neurology Society: Position

- The Child Neurology Society strongly supports exploring new options for infantile spasms
  - Vigabatrin may have a role
- A drug of interest for child neurologists in the US
- Appreciative to the FDA for their thorough review process of the benefits as well as risks of vigabatrin in this devastating condition