



Life in These Parts

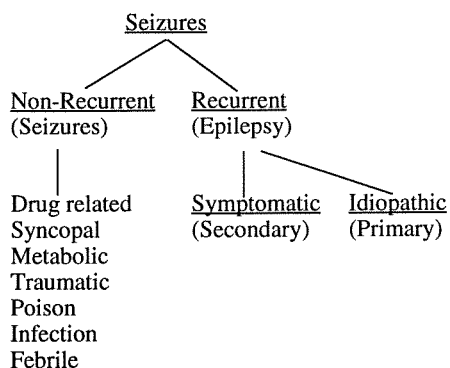
Conference Notes

"Neuroscience advances & the Gamma- Aminobutyric acid (GABA) Receptor"

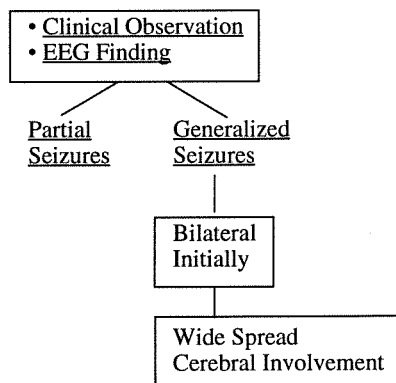
Visiting professor James A. Ferrendelli MD, Professor and Chairman, Department of Neurology, University of Texas—Queen's Medical Center, Friday morning conference, January 24, 1997.

I. Epilepsy

A. General Discussion: Seizures vs Epilepsy



B. Classification of Epileptic Seizures (International Classification)



C. Diagnosis of Seizures:

- History: From patient and witnesses
- PE/Neuro exam
- EEG:
 - Photic stimulation
 - Hyperventilation
 - Sleep deprivation
- Special Studies:
 - CT & MRI
 - Intensive CCTV/EEG monitoring

D. Treatment:

- Antiepileptic drugs in the past:
 - marijuana, bromides, phenobarb
- Present Rx
 - Specific AEDs:
 - phenytoin; carbamazepine (Tegretol); Na Valproate; ethosuximide
 - Non-Specific AEDs:

- barbiturates; benzodiazepines
- 3. New AEDs:
 - Felbamate
 - for children; 3,000 patients studied and 100,000 pts using it in 6 months; Toxicity: aplastic anemia, hepatotoxicity.
 - Gabapentin
 - use in partial seizures; low toxicity
 - Lamotrigine
 - well tolerated; rash 5-6% of patients
 - Topiramate (Released 1 month ago)
 - neurotoxicity
 - Vigabatrin (U.S.-Japan)
 - good drug; available next year
- 4. Parenteral Drugs
 - IV phenytoin
 - markedly insoluble; given IV carefully to prevent extravasation
 - Parenteral Fosphenytoin:
 - Well tolerated, faster administration; IM also; Disadvantages: perineal itching; cost

II. Gamma-Aminobutyric acid (GABA) Synapse

A. General: GABA is the most common neurotransmitter (includes 40% of the drugs).

GABA Receptor Modulates:

- Benzodiazepan receptors; Picrotoxin receptors; Barbiturate receptors; Steroid Receptors

B. Clinical use of drugs at the GABA_A Receptors:

- antianxiety drugs;
- anticonvulsants
- sedatives
- hypnotics
- anesthetics (Also caffeine, amphetamines)

C. Drugs acting at GABA_A Receptors

- Past: alcohol, barbiturates
- Present: benzodiazepines eg Valium
- Future: neurosteroids; butyrolactones

re Butyrolactones: The next 10 years will be exciting times.

Miscellany

A farmer stood leaning on a fence at the edge of his property. He watched as a red sports car come over the top of a hill and followed the road up to the spot where he stood.

"Do you know how I can get to Route 91?" the driver asked.

The farmer thought for a few seconds. Then he said, "Nope."

"Do you know where the nearest turnpike entrance is?" the driver asked.

"Nope."

"How about the town of Hadley. Do you know

which direction it is from here?"

"Nope."

Exasperated, the driver raced his engine. "You don't know very much, do you?"

"Nope," the farmer said. "But I'm not lost."

Larry Wong's Repertoire

"What's a honeymoon salad?"

(It's lettuce alone without dressing).

Potpourri

A man took his terminally ill dog to a vet. The vet took the old dog in the back and laid him on the examining table. His pet cat came in and sniffed the dog. Sniff-sniff here and sniff-sniff there for nearly a half hour until the dog finally stopped breathing. The vet approached the dog owner.

"Sorry, but your dog is dead. There wasn't much we could do for him."

"Is there a charge?" the man asked.

"The charge will be \$850 dollars."

"What? That's preposterous!"

"Well, \$50 dollars is my fee and \$800 dollars for the cat scan."

(An Atlanta Georgia joke as related by 'Don't Quote Me' Ben Tom)

Elected, Honored & Appointed

Ophthalmologist **John Corboy** is the Small Business Person of the Year. John is surgeon and director of the Hawaiian Eye Center with nine locations. He founded the Hawaiian Eye Foundation, a non-profit charitable group which provides services, education and research on vision in Pacific peoples and sponsors eye missions to the South Pacific.

The Talented

Kaneohe resident and singing Straub physician **Kalani Brady** played Sky Masterson (Broadway's leading crap shooter) in "Guys and Dolls" at the Richardson Theater. Kalani's previous role was as a rabbi and Jewish father in "The World of Sholom Aleichem." Kalani admits he is no Marlon Brando, but promise that his character will be suave and debonair with a "devil-may care attitude."

Hypocrite's Oath

Luciel Jokeil, columnist for Island Business discovered a 1935 HMA publication with the following ad for Philip Morris cigarettes: "Take no one's word but your own" as to the advantages of any one cigarette for patients with irritation of the upper respiratory tract due to smoking—The published studies on cigarette differences are merely a starting point—It is only when doctors make their own tests on their own patients who smoke that they are fully convinced of Philip Morris's superiority."

(Shades of HAA?)