This year’s Annual Course focused on diagnosis and management of seizures in patients admitted to intensive care units (ICU), both those with known epilepsy and those with seizures due to systematic illness or infection. The morning sessions were dedicated to diagnostic challenges of defining seizures detected by cEEG and their etiology. Issues related to EEG monitoring in neonates and children were defined, including published guidelines for obtaining cEEG in neonates.

The morning portion of the Annual Course concluded with “Flash Panels” including “Is Continuous EEG Worth the Cost and Use of Resources? Financial and Logistical Issues” and “Who Should be Reading cEEGs? The Role of the Neurointensivist”.

The afternoon session focused on treatment. Etiology, especially hypoxic injury, was identified as the strongest predictor of outcome, along with seizure duration and old age. The Status Epilepticus Severity Score (Rossetti J. Neurol, 2008) was presented as an excellent tool for defining outcome risk. In relation to medications, the use of benzodiazepines was discussed as a first line treatment of status epilepticus. Further discussion identified the Established Status Epilepticus Treatment Trail (ESETT) as a study aimed at exploring the best treatment for patients with treatment resistant status epileptics, as there is no current data to support a “next best” drug.

Joseph I. Sirven, M.D., lectured the crowd on “Pharmacological Treatment of Status Epilepticus in the ICU”. He defined refractory status epilepticus on the basis of time, and/or failed medications. He noted that current studies lack the ability to indicate which medications are most effective, despite the wide variety of drugs available. Dr. Sirven acknowledged that non-pharmacological treatment could be considered, and that the prognosis would help define how aggressive treatment should be. “You need to have protocol,” he said. “You need to have cEEG.”

A highlight of the afternoon session occurring during a debate that broke out regarding whether we should treat anoxic/myoclonic seizures.

The final presentation, lectured by Elizabeth J. Waterhouse, M.D., focused on long-term prognosis and outcomes of status epileptics. A case study presented at the start of the Annual Course made a full circle and was revisited with a discussion of possible outcomes and responses to conclude this year’s program.