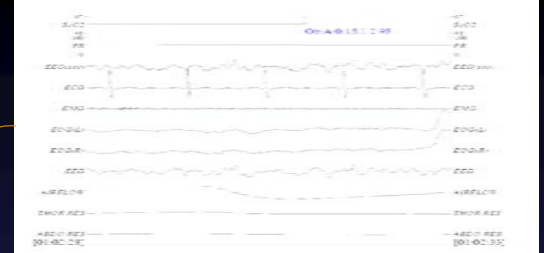


Sleep and Epilepsy

Carl Bazil, M.D., Ph.D., Emily Cohen, Robert Pelgriff



Study Purpose

We are conducting two separate sleep studies, one investigating the sleep medication Lunesta (eszopiclone) and the other involving Lyrica (pregabalin). Both study drugs have been approved by the FDA. Both of these studies will help us to understand how these medications, one already used for sleep (Lunesta) and the other used for epilepsy but that may also improve sleep (Lyrica), could help improve sleep in patients with epilepsy and insomnia. Insomnia is more common among people with epilepsy (30%) than in the general population (about 20%), yet there have not been many studies of sleep disorders in people with epilepsy. Insomnia often results in daytime symptoms, including poor concentration, difficulty with memory, increased irritability, impaired motor coordination, and increased risk of motor vehicle accident. Both studies also include measurements of attention and memory and will help us to know if these medications also improve performance after a night of improved sleep.

More about our sleep studies

Both studies are recruiting men and women with insomnia and well-controlled epilepsy, who are not taking sleep medication.

The Lyrica study began in October of 2007, and we have recruited 6 subjects thus far. This study will continue until we have 12 research subjects. The Lunesta study began in June of 2008, and we have recruited 2 subjects thus far. This study will also continue until we have 12 research subjects. Both studies are conducted at the Comprehensive Epilepsy Center, which is located at 710 W. 168th St., 7th Floor, New York, NY.

During each study, research subjects take the study drug for four weeks and take a placebo pill for four weeks. Research subjects are asked to keep sleep diaries for the duration of each study. Each study requires a single one-hour screening visit, during which research subjects are asked about general medical history, receive a physical exam, and fill out questionnaires.

Overnight visits

Each study also requires several overnight visits at the Comprehensive Epilepsy Center (three overnight stays over a twelve week period for the Lyrica study and four overnight visits over a fourteen week period the Lunesta study). During each overnight session, research subjects receive questionnaires and a sleep test known as polysomnography, which measures your brain waves, breathing, and leg movements as you sleep. By looking at patients' brain waves, we can observe the different stages of sleep (Stages 1 - 4 plus REM sleep, each of which is characterized by a different wave pattern) and amount of time that the patient spends in each stage while asleep. Examination of patients' breathing allows us rule out sleep apnea or other respiratory problems as the cause of sleep disorder. Finally, by observing leg movements during sleep, we can rule out involuntary limb movement as the cause of sleep problems.