Art Provides Window on Epilepsy Experience

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — Artwork created by persons with epilepsy can help others gain insight to the experiences of patients with the condition, Dr. Steven C. Schachter said at the annual meetings of the American Epilepsy Society and the Canadian League Against Epilepsy.

Dr. Schachter has collected more than 1,200 paintings, photographs, and other works of art by 52 artists with epilepsy from around the world. "I often show the art when I'm seeing other patients to help them verbalize feelings," he said.

Many of the works in his collection appear in "Vision: Artists Living With Epilepsy" (Elsevier Science and Technology, 2003), a book that was edited by Dr. Schachter. All royalties from sales of the book support the Epilepsy Foundation.

Studying the art of people with epilepsy serves to recognize their contributions to society, but it also raises certain research questions, said Dr. Schachter, professor of neurology at Harvard Medical School, Boston, and director of neurotechnology at the Center for Integration of Medicine and Innovative Technology, Boston. "For example, are people with epilepsy particularly likely to engage in artistic activities?" he asked. "Is there a link between epilepsy and creativity? If so, what are the epilepsy-specific variables that are involved?"

Although he did not offer answers to those questions during his presentation, he did discuss four general themes that emerge in the artwork in his collection:

▶ **Seizures and the postictal state.** Many works represent the artists' conscious experiences during their seizures. "One artist says there are many times during her seizures that her world seems very unreal," he said. "She feels like she's walking in a dreamlike state. Her art represents this experience."

He added that for many epilepsy patients, "the postictal state is their only clue that they've had a seizure. It can be a period of time with very intense emotional symptoms."

One of the artists told Dr. Schachter that, after having a seizure she "has an overwhelming sense that everything she knows to be present in her world is actually distant in time and space. With that comes a powerful sense of anguish, pain, and loneliness."

▶ **Psychiatric comorbidities.** Themes that reflect anxiety and depression also are common in the artwork, and the prevalence of these conditions may be higher in people with epilepsy than in the general population. The fear of the next seizure and the fear of dying "are all common anxieties people with epilepsy have," he said.

One of his patients likened the beginning of a seizure to being "in front of an oncoming train with no way to escape." Psychosis also occurs in patients with epilepsy, perhaps as a function of severity.

▶ **Psychosocial aspects of epilepsy.** These include themes of isolation from society, stigma, and reminders of living with epilepsy. "For some patients, the place where they feel the safest is their home or bedroom, which is a common theme in the art," Dr. Schachter said.

▶ **Non–epilepsy related.** There are many artists with epilepsy "whose art has no ostensible connection to their epilepsy at all," he said. Such works serve to destigmatize epilepsy, "to emphasize that people with epilepsy … can be creative and contribute to society. It's art for art's sake."

The presentation was part of the AES Annual Course, which is supported by an educational grant from Abbott Laboratories, Cyberonics, and GlaxoSmith-Kline Pharmaceuticals. ■

KLAAS VERBOOM/PHOTOGRAPHED BY ANDRE NUFER

Dr. Steven C. Schachter's collection of more than 1,200 works of art by people with epilepsy includes "Springtime."

JENNIFER HALL

"Transcending" reflects the postictal state many patients experience.

Frequency, Painfulness of Restless Legs Must Guide Treatment

BY JOHN R. BELL
Associate Editor

BALTIMORE — When deciding which drug to prescribe a patient with restless legs syndrome, the frequency and painfulness of symptoms are crucial to making the correct choice, Dr. Christopher J. Earley said at a neurology meeting sponsored by Johns Hopkins University.

"For [75%]-80%, depending on the population that you deal with, pain is not what they experience," said Dr. Earley, a neurologist at Johns Hopkins. A far greater portion instead describe their RLS as uncomfortable, he said. But for those with painful RLS, that pain must be treated. "So I tend to use the antiseizure medications [e.g., gabapentin, lamotrigine, pregabalin] or the opiates as my first line of treatment, as opposed to the dopamine [DA] agents, when I'm dealing with painful symptoms," he said. "If it's partially responsive … then I will consider the dopamine agonists. If I really get desperate … I might consider sedation."

For painless nightly RLS, he advises a DA agonist as first-line therapy, opiates as a second-line choice, and sedatives as third-line treatment. Frequent painless RLS (2-3 nights per week) warrants a sedative first, followed by opiates and, if those fail, levodopa. For occasional RLS (less than twice per week), he advises either a half or whole tablet of carbidopa 25 mg/levodopa 100 mg (available as Sinemet and Parcopa brands) as needed for first-line therapy. "This is going to be effective in 99.9% of patients, barring side effects like nausea," he said. He recommends a DA agonist and a sedative as second- and third-line treatment, respectively. Drugs that can aggravate restless legs syndrome include neuroleptics and antiemetics, as well as SSRIs and tricyclic antidepressants (except for bupropion and trazodone) and antihistamines.

For painless nightly RLS, the best approach might be a dopamine agonist first, opiates second, and sedatives as third-line treatment.

A disadvantage of the DA agonists is that they take 2 hours to reach peak dose effect (3 hours if taken with a meal or after symptom onset), compared with 30-60 minutes for opiates. Thus dopamine agonists are most useful for situations such as airplane flights, he said, but less practical for nighttime RLS. Dr. Earley favors levodopa for occasional nonpainful restless legs syndrome.

"If you have any doubts about whether this is RLS or not RLS, you can use the levodopa"-carbidopa combination (carbidopa 25 mg/levodopa 100 mg) of ½-1½ tablets for 3 days. "If they get no real benefits from that, this is not RLS—at least not the RLS that I know."

The DA agonists do have other disadvantages besides their delayed effect, Dr. Earley noted. They can cause compulsive behaviors—though this has been observed more in patients with Parkinson's disease than with restless legs syndrome. They also can cause hypersomnia. "It's almost like narcolepsy," he said. "They're sitting there talking to someone, and they literally fall asleep in the middle of the conversation."

Moreover, DA agonists risk the phenomenon of augmentation, whereby an increase in dosage leads to an increase in symptoms, so that a patient is treated effectively for a time period in which RLS occurs (e.g., bedtime), but then the RLS begins to occur either before or after the treated period. "Augmentation is the single biggest reason why you have to stop this drug," Dr. Earley warned. He consulted on the case of a woman whose RLS progressed over the course of 2 years from initially requiring one dose of Sinemet nightly "to taking Sinemet every hour on the hour, and she was only getting 2 or 3 hours of sleep." He urged physicians to "never, ever, ever go beyond the recommended dose. In fact, I never achieve the recommended dose."

He advised that when patients taking a DA agonist for sleep complain of RLS symptoms before or after bedtime, the physician should not prescribe additional drug. As long as the patient can sleep without RLS awakening them or interfering with their falling asleep, RLS symptoms at other times of the day are not worth medicating. They are free to walk around in the evenings and the primary lifestyle problem of RLS interference with sleep is still under control, Dr. Earley said.

Notably, opiates do not pose augmentation risk, he said. With opiates, "you're going to get about 85% of them up walking away relatively happy." Options in this drug category are codeine, propoxyphene, controlled-release oxycodone, methadone, and the fentanyl patch. Dr. Earley observed that methadone is by far the least expensive, at approximately $0.05 per dose. Dr. Earley cautioned that opiates have relatively short half-lives—approximately 4 hours for codeine derivatives and roughly 6 hours for the synthetic opiate propoxyphene.

Iron deficiency has been implicated as a possible cause of restless legs syndrome, he noted. "I check ferritins in everybody," he said. Deficiency is defined as less than 18 ng/mL or iron saturation less than 16%. He recommends ferrous sulfate 325 mg plus 200 mg vitamin C or orange juice, to be given on an empty stomach in the absence of calcium or milk. ■