A Proper Diagnosis of Psychogenic Nonepileptic Seizure Prompts Fewer Clinic Visits, Study Finds

BY JAMIE TALAN

They arrive with complaints that are all too commonly seen with seizures and neurologists typically will suspect epilepsy — and ultimately, after several failed medication trials, they will be wrong. Now, scientists at the Michael E. DeBakey Veteran Affairs Medical Center in Houston have gone back through military health records to study complaints of seizures that were confirmed following video-EEG as another complex diagnosis — psychogenic nonepileptic seizures (PNES).

Karen Nunez-Wallace, MD, a fourth-year neurology resident at Baylor College of Medicine, and her colleagues studied the medical records of veterans to see whether their health care utilization changed after hearing — and understanding — that their symptoms were the result of underlying psychiatric and not neurologic problems. The study was conducted with Dona Murphey, MD, another neurology resident, and attending David K. Chen, MD.

ARTICLE IN BRIEF

Investigators pored through eight years of medical records — seven years before the diagnosis of psychogenic nonepileptic seizures (PNES) was made and one year after — and found that the patients’ use of hospitals and clinics decreased dramatically after they were given the proper diagnosis.

DR. KAREN NUNEZ-WALLACE said that once the diagnosis of psychogenic nonepileptic seizures was made, the patients made far fewer outpatient, inpatient, and emergency room visits.

A ‘BEST PAPER’ PICK: Neurology Today editorial advisory board member Jacqueline A. French, MD, professor of neurology at New York University Comprehensive Epilepsy Center and president of the American Epilepsy Society, selected this as one of the “best papers” on epilepsy from the AAN annual meeting. Look for the videocamera icon to link to a video interview with Dr. French, offering additional insights and commentary on this study.
Psychogenic Nonepileptic Seizures

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The prevalence of PNES in the general population is estimated to be two to 33 per 100,000. About 10 to 30 percent of patients referred for “refractory epilepsy” end up with a diagnosis of PNES.

Long-term monitoring is the only way to really separate out PNES from epilepsy. But many centers around the country are not equipped with the tools to capture seizures in real time and watch the behavior of the patient during an event. The Texas team pored through eight years of records — seven years before the diagnosis of PNES was made and one year after — and found that the patients’ use of hospitals and clinics changed dramatically after they were given the proper diagnosis.

The results were presented during the AAN annual meeting in San Diego.

STUDY METHODOLOGY

The researchers selected 65 patients from a sequential list admitted for long-term monitoring to the Veterans Administration Medical Center from 2009 to 2012. They looked at their electronic medical records before and after the diagnosis of PNES to figure out whether they used fewer medical services once they understood that they did not have epilepsy.

They reported a trend toward fewer outpatient visits related to PNES as well as various other diagnoses following the long-term monitoring, according to Dr. Nunez-Wallace. They found there was a decrease in annual change of visits for outpatient (p < 0.001), inpatient (p < 0.001), and emergency room visits (p < 0.001) for PNES purposes. There was also a decrease in the number of AEDs per year (p < 0.001).

The researchers said that it seemed that patients accepted the diagnosis as they did not seek a second opinion or develop new, unexplained symptoms. “We did not see any evidence of symptom substitution and increase of resources for other purposes, for example, unexplained chest pain, headaches, etc.,” she said.

They tested different variables to see if they had any effect on these significant findings: degree of acceptance of diagnosis, subjective change in frequency and intensity of events, age of onset, age of diagnosis, sex, and marital status. “However, none of these variables seemed to be correlated with our significant findings,” Dr. Nunez-Wallace said.

She added that previous studies have found that up to a third of patients diagnosed with PNES have a therapeutic benefit from being given the diagnosis alone.

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ARTICLE IN BRIEF
Policy experts discuss the effect the sequestration will have on Medicare reimbursement for neurologists and offer some potential coding strategies to mitigate potential losses in revenue.

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EXPERTS WEIGH IN
“Psychogenic seizures are very common,” said Dr. French. “These findings suggest that people were able to self-monitor and they no longer needed to seek medical attention for what they thought were seizures. It is a positive outcome for a problem that we all see in our practices.”

“This is a challenging diagnosis,” added Gregory Kent Bergey, MD, a professor of neurology and director of the Johns Hopkins Epilepsy Center and vice chair for research in the department of neurology at Johns Hopkins. Dr. Bergey said that many patients with PNES have depression, anxiety or a mood disorder “They are not malingering. They suffer from subconscious stressors.”

He said that it would be helpful if neurologists could arrive at the diagnosis earlier. “Generally, patients describe what sounds like a seizure and a physician will put them on an anti-seizure medication. If that doesn’t work, they’ll move on to prescribe another medication and then another if that doesn’t work. I suspect that an earlier appreciation of the fact that seizure medication is not working would help in the earlier recognition. The only way to diagnose psychogenic seizures is to send the patient in for continuous video EEG monitoring.”

Selim R. Ben badis, MD, professor and director of the Comprehensive Epilepsy Program University of South Florida and Tampa General Hospital, became interested in PNES as a fellow working at an epilepsy referral center.

“It was so common and so neglected, especially by the mental health community,” said Dr. Benbadis. “It is very hard to find psychiatrists or psychologists interested in the issue, or who believe in the diagnosis. Patients are literally caught in the middle.”

PNES is not different than other conversion disorders but neurologists actually have a tool that can rule out conversion disorders but neurologists actually have a tool that can rule out epilepsy: EEG video monitoring. “PNES is a relatively easy diagnosis to make once we look at the EEG and the video tapes,” said Dr. Benbadis. “If you explain it to patients carefully and compassionately they do understand. The real problem comes from finding mental health professionals to deliver treatments.” He said that studies have shown that selective serotonin reuptake inhibitors work, as does cognitive behavioral therapy.

TUNE IN: Investigators pored through eight years of medical records — seven years before the diagnosis of psychogenic nonepileptic seizures (PNES) was made and one year after — and found that the patients’ use of hospitals and clinics decreased dramatically after they were given the proper diagnosis. Watch here as Neurology Today editorial advisory board member Jacqueline A. French, MD, professor of neurology at New York University Comprehensive Epilepsy Center and president of the American Epilepsy Society, discusses what this can mean for clinicians seeing patients with PNES: http://bit.ly/Xg56E5.

DR. BRUCE SIGSBEE said the 2-percent Medicare reimbursement reduction would typically lead to a 5-percent decrease in take-home pay; the 7-percent cut translates into an 18-percent drop in take-home pay for the average practice, creating a dire situation.

Former AAN President Bruce Sigsbee, MD, voiced concern that the cuts are tough to absorb amid ever-rising overhead expenses. A neurology practice typically has a 60-percent overhead, which pays for salaries, benefits, and malpractice insurance. Other nonprocedural specialties — such as primary care, infectious diseases, endocrinology and rheumatology — have similar overhead percentages.

A 2-percent reimbursement reduction typically leads to a 5-percent decrease in take-home pay. A 7-percent cut translates into an 18-percent drop in take-home pay for the average practice, creating a dire situation, according to Dr. Sigsbee, who practices at Pen Bay Physicians & Associates in Rockport, ME.

“We are employed by a hospital and there’s some buffer,” he said of his multi-specialty 60-physicians group, which includes four neurologists. Salary is based in part on productivity, not actual reimbursement. This arrangement has been in place for about four years, and Dr. Sigsbee expects some changes.

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Dr. Benbadis wrote an editorial on the topic in February in the journal, Neuropsychiatry, in which he points out the lack of involvement of the professional mental health organizations. “Outcome and follow-up are notoriously poor for this patient population. For PNES, a common scenario is that patients are caught going back and forth between psychiatry and neurology.”

LINK UP FOR MORE INFORMATION:
• Neurology archive on psychogenic nonepileptic seizures: http://bit.ly/YkaXIN