Newer AEDs Raise Risk of Self-Harm, Suicidality

BY MICHELE G. SULLIVAN
FROM NEUROLOGY

Newer antiepileptic drugs that are associated with a high risk of depression may be the only agents in this class of medications that increase the risk of suicidal and self-harming behavior, according to a large, case-control study.

Epilepsy patients who took newer antiepileptic drugs (AEDs) with depressive side effects (levetiracetam, topiramate, tiagabine, and vigabatrin) had threefold greater odds of suicidal or self-harming behavior, compared with similar patients who did not use AEDs.

But a subanalysis of the cohort that looked at 15 different AEDs, including barbiturates and conventional drugs, found that only levetiracetam significantly increased the odds of suicidal behavior or self-harm (odds ratio, 6.4). The relationship between suicidal or self-harming behavior and the drugs topiramate and vigabatrin became nonsignificant in the subanalysis, according to the report published in Neurology.

The investigators, led by Dr. Frank Andersohn of Charité University Medical Center in Berlin, found that patients with preexisting psychiatric disorders may bear the brunt of these increased risks. “In our study the risk of self-harm or suicidal behavior was observed for new AEDs with a high risk of depression was only evident in patients with, but not in those without, psychiatric comorbidity. This apparently differential AED effect with respect to psychiatric comorbidity was, however, not significant and may thus have been observed by chance alone.”

However, the investigators noted that the low number of cases reduced the study’s power to detect significant interactions between psychiatric comorbidity and suicidal and self-harming behavior.

The study included up to 5 years of follow-up data on 44,300 patients with epilepsy who were treated with at least one AED during 1990-2005. All patients were included in the U.K. General Practice Research Database. The 453 cases of self-harming or suicidal behavior were matched by age and sex with 8,962 controls who had no such experience (Neurology 2010;75:335-40).

The entire cohort was approximately 52% male; the mean age was 36 years. Most (68%) had an undefined epilepsy type. Controls were significantly more likely to have psychiatric comorbidity, including a history of self-harm, antidepressant use, depression without treatment, and psychotic disorder.

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Major Finding: Newer antiepileptic drugs that pose an increased risk of depression were associated with a significant increase in the odds of suicidal and self-harming behavior (odds ratio, 3.08).

Data Source: A nested, case-control study of 44,300 patients who took at least one AED in 1990-2005.

Disclosures: The study was sponsored by Bayer Schering Pharma, for which one investigator has served as a consultant. Two other investigators reported financial relationships with companies that manufacture AEDs.

Drug-Related Side Effects Still Problem for Epilepsy Patients

BY HEIDI SPLETE
FROM THE ANNUAL MEETING OF THE AMERICAN ACADEMY OF NEUROLOGY

TORONTO – About 40% of epilepsy patients are bothered by the effects of their antiepileptic drugs, based on data from a survey of adults with epilepsy.

Information on the tolerability of antiepileptic drugs (AEDs) and the reasons for discontinuing treatment are limited, said George J. Wan, Ph.D., in a poster presentation.

To examine drug tolerability and treatment satisfaction, Dr. Wan, of Ortho-McNeil Janssen Scientific Affairs LLC, and his colleagues reviewed data from the National Survey of Epilepsy, Comorbidities, and Health Outcomes (EPIC), a large survey conducted in the United States in 2009 that included 7,500 epilepsy patients and 2,500 controls.

The researchers evaluated responses from 5,117 self-reporting epilepsy patients. A total of 2,385 respondents reported being formally diagnosed with epilepsy or a seizure disorder; of those, 1,415 (59%) were taking antiepileptic drugs at the time of the survey. About 60% of the respondents reported taking one AED, 35% reported taking two or three, and 5% reported taking four or more.

The respondents had been taking AEDs for an average of 115 months.

Major Finding: Of patients who stopped taking AEDs, 45% cited side effects as a reason; those taking two or more AEDs were less likely to be satisfied with the side effects than were those taking one AED.

Data Source: National Survey of Epilepsy, Comorbidities, and Health of 7,500 epilepsy patients and 2,500 controls.

Disclosures: The presenter is an employee of Ortho-McNeil Janssen Scientific Affairs LLC, which supported the study.

Drug-related side effects were a major problem for epilepsy patients and highlight the need to develop more tolerable treatment regimens, experts said, adding that further research is needed to quantify the impact of AED treatment on other patient-reported outcomes, including health status.