## Comparison of depressive symptoms between patients with chronic epilepsy and migraine

## Liang-Po HSIEH, Hui-Ju KAO

Department of Neurology, Cheng-Ching Hospital, Taichung, Taiwan

*Objective:* Interictal depression is common among epilepsy patients.<sup>1,2</sup> Migraine is often comorbid with psychiatric disorders, particularly depression and anxiety.<sup>3</sup> The purpose of this study was to assess the prevalence of interictal depression and compare the depressive symptoms between patients with chronic epilepsy and migraine in a community hospital in Taiwan.

*Methods:* We studied 74 consecutive epilepsy outpatients (47 male and 27 female; mean age =  $35.8\pm15.5$  years) and 74 outpatients with migraine (11male and 63 female; mean age =  $38.9\pm19.7$  years). The depressive symptoms were assessed with the Hamilton Depression Rating Scale (HDRS). Patients with depression was defined as having HDRS score of greater than 10. The HDRS score of 10 to 13 was defined as minor depression, 14 to 17 as moderate depression, and higher than 17 as major depression.

*Results:* Twenty-four patients (32%) with epilepsy and 43 patients (58%) with migraine had depression (HDRS  $\geq 10$ ). The prevalence of major depression (HDRS > 17) was 14% in the epilepsy group and 11% in the migraine group. The average depression scale was higher in the migraine group as compared to the epilepsy group (11.3  $\pm$  5.2 vs 7.2  $\pm$  6.7; p<0.01). In epilepsy group, depression was more common among the patients with symptomatic epilepsy (14/28 vs 10/46; p<0.05) and temporal-lobe epilepsy (17/40 vs 7/34; p<0.05). Depressed mood, agitation, retardation and absence of insight were the symptoms more commonly seen among the epilepsy-depression patients as compared to the migraine-depression patients (p<0.05).

*Conclusion:* More than half of patients with chronic migraine and about one third of patients with epilepsy had depression. Major depression was more common among the epilepsy sufferers seen in every seventh patients. Symptomatic and temporal lobe epilepsy patients also had higher rates of depression. Depressed mood, agitation, retardation, and absence of insight were the depressive symptoms more commonly seen among epilepsy patients as compared to those with migraine.

## References

- 1. Lambert MV, Robertson MM. Depression in epilepsy: Etiology, phenomenology, and treatment. *Epilepsia* 1999; 40 (suppl 10): S21-47.
- Mendez MF, Doss RC, Taylor JL, Salguero P. Depression in epilepsy: Relationship to seizure and anticonvulsant therapy. J Nerv Ment Dis 2003; 181: 444-7
- 3. Sheftell FD, Atlas SJ. Migraine and psychiatric comorbidity: from theory and hypotheses to clinical application. *Headache* 2002; 42: 934-44.