

CLINICAL EPILEPTOLOGY

Application of a newly proposed diagnostic scheme of seizure and epilepsy classification 2001 to adult patients

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Background and Objective: The major concepts of a newly proposed diagnostic scheme of seizure and epilepsy classification by International League Against Epilepsy (ILAE) in 2001 (the 2001 scheme) were to provide a standardized description of individual patients and to facilitate a logical clinical approach by the use of the axes.¹ However, so far there have been only a few papers to report experiences to apply the scheme in the clinical field and still fewer to deal with adult patients. The aim of this study was to clarify the clinical validity of the 2001 scheme in adult patients with epilepsy. Preliminary data briefly appeared previously as a part of the letter.²

Methods: Consecutive 100 patients with epilepsy who visited the Neurology Clinic (group 1) and 100 patients with intractable epilepsy who had prolonged video-EEG monitoring (group 2) in Kyoto University Hospital were employed. The 2001 scheme (Axis 1 to 4) was applied to each patient and compared with the diagnosis by ILAE seizure (1981) and epilepsy (1989) classification.

Results: Group 1 had 150 seizure types (generalized tonic-clonic seizures: 44%, complex partial seizures (CPS): 29% and simple partial seizures: 21%). In Axis 1 (glossary) in the 2001 scheme, 184 and 333 items were listed in groups 1 and 2, respectively, describing the seizure semiology independent of EEG findings. In Axis 2 (seizure types) of the group 1, 59% and 25% of CPS were further classified into focal motor and sensory seizures, respectively, but the rest (23%) had no category to fall into. In Axis 3 (epilepsy type) familial TLE was newly listed, but 24 patients with neocortical epilepsy, who could be further classified by 1989 classification, gathered in one category, and five patients with symptomatic generalized epilepsy according to the 1989 classification could not be classified. Axis 4 described detailed etiology, but the list was still insufficient.

Discussion and Conclusion: Axis 1 can document the ictal clinical manifestation without EEG information and is practically helpful for precise description of ictal symptoms. Axis 2 and 1 may provide redundant information. Axis 2 and 3 are not either supplementary to or replaceable of ones in 1981 and 1989, respectively. Axis 4 helps to understand the patients' current and possibly future status. Recent report of the ILAE classification core group proposed a revised list of seizure types and syndromes; however, they are still in an ongoing dynamic process. Further research from clinical fields is mandatory to establish more appropriate and more practical classification, and to achieve worldwide consensus.

References

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