

Evaluation of dissociative symptoms in patients with pseudoseizures

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Background and Objective: Patients with epilepsy often have psychogenic pseudoseizures (PS) in addition to epileptic seizures. PS are very important in clinical practice, as some PS are resistant to treatment and can reduce a patient's quality of life. However, the pathophysiology of PS is still unclear. PS can occur in non-epileptic patients, and dissociation is presumed to be the underlying mechanism of PS in such patients. Similarly, PS in epileptic patients may be associated with dissociative states. The Dissociative Experience Scale (DES) was developed as a screening tool for dissociative symptoms¹, and it is widely used in the field of dissociation research. To clarify the relationship between PS and dissociation, we evaluated general dissociative symptoms in epilepsy patients with PS using a Japanese version of the DES (J-DES).

Methods: Subjects consisted of 22 epilepsy patients with PS (male 9, female 13, mean age 34.1 years) and 22 epilepsy patients with no PS (male 10, female 12, mean age 33.8 years). Diagnoses of PS were established using video-EEG monitoring, or on the basis of the semiology of their seizures. There were no significant differences in age, sex, epilepsy type, seizure frequency, years of education, or a number of antiepileptic drugs between the two groups. J-DES was administered in all subjects. J-DES scores were compared between the two groups and analyzed for association with other clinical features.

Results: The mean J-DES score in patients with PS (26.9±19.8) was significantly higher than that in those without PS (13.5±14.2). High DES scores (J-DES >30) were more frequently observed in patients with PS (12/22) than in patients without PS (3/22) ($\chi^2=5.35$, $p=0.045$). Logistic regression analyses revealed that J-DES >30 was a risk factor in the development of PS. (Exp(B)=0.078, CI:1.27-29.16, $p=0.024$). DES score was not directly associated with PS frequency or its level of life disturbance.

Discussion and Conclusions: The J-DES score in patients with PS was significantly higher than in patients without PS. Patients without PS had similar total J-DES scores (13.5) to those reported in adults from the general population (approximately 10). In addition, patients with higher score of the J-DES scores (>30) had PS more frequently than those with lower score of the J-DES scores (<30). This finding suggests that dissociation may play a significant role in the pathophysiology of PS in patients with epilepsy. The J-DES may, therefore, be a viable screening tool for the detection of PS in patients with epilepsy. On the other hand, neither frequency of PS nor their levels of life disturbance were directly related to J-DES scores. These findings suggest that while J-DES scores may indicate occurrence of PS, they are not proportional to the severity of the symptoms of PS.

Reference

1. Bernstein EM, Putnam FW. Development, reliability, and validity of a dissociation scale. *J Nerv Ment Dis* 1986; 174: 727-35

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