

The risks of suicidality in adult patients with epilepsy

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Because of the big differences in suicidality rates across studies, we aimed to determine the frequency rate and risk variables of suicidality in epileptic population. Included were 200 adult patients and 100 matched healthy subjects. The standardized clinical interview of Diagnostic and Statistical Manual of Mental Health Disorders (4th edition) (DSM-IV), BDI-II, Beck depression inventory (2nd edition) (BDI-II), HAM-A, Hamilton Anxiety Rating Scale (HAM-A), Attention Deficit Hyperactive Disorder Self-Report Scale (4th version) (ADHD-SRS-IV), Yale Brown Obsessive Compulsive Scale (Y-BOCS) and Eysenck Personality Questionnaire-Revised Rating Scale (EPQ-R) testings for depression, anxiety, inattention, obsession-compulsion symptoms and personality traits were used for diagnosis and assessment of severity of psychiatric symptoms. Blood concentrations of serotonin, catecholamines and dopamine were also measured. Suicidality was reported in 35%, of them. 80%, 72.86%, 34.30%, 55.71% and 52.9% had depression, anxiety, inattention, obsession and aggression, respectively. Psychotic (44.6%) and extroversion (21.5%) personality traits were prevalent in patients without suicidality. Patients with suicidality had higher scores of BDI-II, HAM-A, ADHD-SRS-IV ($P=0.0001$) and Y-BOCS ($P=0.037$) but lower scores in psychotic ($P=0.0001$), and extroversion ($P=0.025$) personality traits. Patients with epilepsy had low serotonin ($P=0.006$), noradrenaline ($P=0.019$) and adrenaline ($P=0.0001$) levels. With suicidality, significant correlations were identified between BDI-II and HAM-A ($r=0.886, P=0.0001$), ADHD-SRS-IV ($r=0.512, P=0.0001$), Y-BOCS ($r=0.582, P=0.0001$), psychotic ($r=-0.352, P=0.003$) and extroversion ($r=-0.474, P=0.0001$) personality traits scores, age ($r=0.235, P=0.0001$) and duration of illness ($r=0.247, P=0.041$) and between noradrenaline levels and age at onset ($r=-0.502, P=0.024$). Suicidality is frequent with epilepsy. Epilepsy-related neurobiological and psychiatric symptoms and disorders are important risk variables.

Biography

Dr. Sherifa Ahmad Hamed, female, Associate Professor of Neurology, Faculty of Medicine, Assiut University Hospital. Dr. Hamed is interested in the field of Neurology, Pediatric Neurology, Neuroscience, neuroregeneration, Neurogenetics, and Neuropsychopharmacology. She has more than 75 international publications, 16 review articles and 6 book chapters. She is serving in the editorial board of 9 journals and as a reviewer for 40 medical journals. She supervised many thesis works for master and doctorate degrees.

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