Physical injuries in patients with epilepsy and their associated risk factors.

Asadi-Pooya AA, Nikseresht A, Yaghoubi E, Nei M.

Neurosciences Research Center, Shiraz University of Medical Sciences, Shiraz, Iran.

Abstract

OBJECTIVES: To determine the frequency, nature, and risk factors associated with physical injuries in patients with epilepsy.

METHODS: In this retrospective cohort study, patients 18 years of age and older with active epilepsy for at least 1 year were included. A questionnaire (including age, gender, education, type of epilepsy, seizure frequency, having aura, drug compliance, polypharmacy, comorbidity, type and place of injury) was completed from patients and healthy individuals. Statistical analyses were performed using multiple logistic regression and Chi-square tests.

RESULTS: 264 patients with epilepsy and 289 healthy participants were studied. Among patients, 8.7% reported severe injuries and 44.3% had mild injuries. Most patients reported soft tissue injuries, followed by dental injury, burn, and head injury. Severe injuries were 2.9 times more frequent among patients having generalized tonic-clonic seizures (GTCS) compared to healthy control; this was not statistically significant (P=0.07). No patient reported having severe injuries due to SPS, myoclonic or absence seizures. Mild injuries were 10.3 times more frequent among those with GTCS compared to healthy control (P=0.001). The relative risk for having injury in patients compared to control group was 3.42 (95% confidence interval: 2.50-4.69). Injury was significantly related to having GTCSs, illiteracy, having fall with seizures, comorbidity and having uncontrolled seizures.

CONCLUSION: Physical injuries are common in patients with epilepsy; however most of these injuries are mild. Severe injuries rarely occur in patients with seizures other than GTCS.