Epileptic patients are encouraged to lead a normal life as far as possible. There is little information concerning the incidence of traumatic events in epileptic patients compared to normal subjects.

During a period of 3 months we presented a questionnaire to consecutive patients with epilepsy attending our tertiary referral outpatient epilepsy clinic and age and sex matched controls, regarding physical traumatic events in the preceding 3 months.

There were 145 epileptic patients: 121 with seizures (age: 36(15y, 50 % males), 24 seizures-free (age: 39(17y, 13 males), and 145 controls (age: 36(15y, 50 % males). There was no significant difference between the two subgroups of epileptic patients regarding the duration of epilepsy and type of seizures. Traumatic events (n = 27, three of which were seizures-unrelated) were most common in patients with seizures followed by controls (n = 20) and absent in seizure-free patients (p<0.001). Head was most commonly injured in epileps (p = 0.002) while the extremities were more commonly involved in controls (p = 0.04). Epileptic patients with seizures had traumatic events mainly at home whereas controls had traumatic events mostly at work and in public places (p<0.001). There was no difference regarding the type and severity of trauma between the two groups.

Traumatic events are more frequent among epileptics with seizures, compared to normal subjects or epileptics with controlled epilepsy. However, traumatic events not related to seizures are fewer in epileptic patients with and without seizures compared to controls, resulting probably from increased cautiousness by persons with epilepsy.

Diagnostics of Epilepsy and Its Preclinical Stage by the Method of Fractal EEG Analysis. SK Khoshchev, EA Korsakova, VM Urtitsky, VP Slezin (VM Bekhterev Psychoneurological Institute, St.Petersburg, Russia)

Rationale: The advantage using of the new diagnostic method of fractal EEG analysis is substantiated in the present study. This method permits to analyse the portions of EEG without a paroxysmal activity.

Methods: The EEG recording was performed using the 19-channel digital encephalograph 'Eencephalan-131-01' (Taganrog, Russia) based on an IBM-compatible personal computer. The frequency of signals discretisation was 160 Hz. Electrodes were placed according to the international 10-20 system. The derivation O1 with distinctly expressed alpha-rhythm was selected for analysis. Fractal dimension of alpha-rhythm power spectra variation (D, when D = 1.01) served as quantitative characteristic of the results. The fractal dimension was measured for background EEG without a paroxysmal activity on the analysis epoch of 5 min.

Results: Fractal dimension of background EEG was obtained to compose 2.05(0.16 for the group of clinically health subjects (n = 10) and to increase to 2.24(0.11 for the group “predisease” of subjects not suffering from epileptic fits (n = 27), but with a paroxysmal activity which visually observed on EEG. The fractal dimensions of EEG increased more else to 2.37(0.07 for the group of epileptics (n = 29).

Conclusions: The method of fractal EEG analysis successfully elicits differences of background brain activity on various stages of epilepsy pathogenesis that is particularly important on its preclinical stage.

Comparing Efficacy of Carbamazepine vs Na-Valproate on 86 Complex Partial Seizures. AN Mozei (Iran Neuropsychiatry Society, Tehran, Iran)

Material, object, method: Clinical data and 3 courses EEG, confirmed the pure complex partial seizures (CPS, Myoclonus and/or Psychomotor attacks) cases, aged (14-22 Yrs). With (2-10 FITS per WEEK. (Divided into 2 separate groups): 1) 50 Cases out of 86 (30 Males, 20 Females) took CZN Monotherapy (Carbamazepine) during 18 Months, maintenance daily dose ranged 200-600 mg t.i.d (100-200 mg/kg), in 47 cases 100 % attacks controlled, (reduced to the limit of 65 % in 3 Cases.

2) 36 patients (30 Males, 6 Females) took Na-Valproate as Mono-therapy for 18 Months, daily dose (30-50 Mg/Kg), frequency of their attacks curbed to 100 % in 28 cases, (reduced to 70-80 %) in 8 patients.