"Could early maltreatment (physical, sexual or severe emotional abuse) stimulate the amygdala into a state of heightened electric irritability, through excessive exposure to stress hormones? We reasoned that amygdaloid over-excitation could produce symptoms similar to those experienced by patients with temporal lobe epilepsy (TLE). During TLE seizures, patients remain conscious while experiencing a range of psychomotor symptoms brought on by the "electrical storms" in the limbic area. Associated effects include motor-related manifestations such as uncontrollable staring (AKA the "traumatic stare") and/or unconscious twitching. Disconnected feelings of déjà vu and mind-body dissociation are also common. To explore this relationship I devised a checklist that assesses the frequency in which these traumatized patients experience TLE-related symptoms. In 1993 my co-workers and I reported results from 253 adults who came to an outpatient mental health clinic for psychiatric evaluation. Slightly more than half reported being abused physically, sexually or both during childhood. Compared with patients who reported no such ill-treatment, average checklist scores for TLE symptoms were 38% greater in the patients with physical but not sexual abuse, and 49% higher with patients with sexual abuse alone. Patients who acknowledged both physical and sexual abuse had average scores 113% higher than patients reporting none. Abuse before the age of 18 had more impact than later abuse.

"In 1994 our team sought to ascertain whether childhood physical, sexual or psychological abuse was associated with EEG abnormalities, so as to provide a more direct measure of limbic irritability than our checklist. We reviewed the records of 115 consecutive admissions to a child and adolescent psychiatric hospital to search for a link... We observed EEG abnormalities in 72% of those who had documented histories of serious physical and sexual abuse, vs. only 27% in nonabused patients. The irregularities arose in frontal and temporal regions and to our surprise, specifically involved the left hemisphere rather than both sides, as one would expect. Our findings dovetailed with a 1978 EEG study of adults who were victims of incest. The principle investigator, Robert Davies of Yale Medical School, found that 77% of the group exhibited EEG abnormalities and 27% experienced seizures."