



### 115 Violence and Epilepsy: The Importance of Prompt Identification of Post-Ictal Psychosis-Description of a Case

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After attending this presentation, participants will be able to recognize the features of the relationship between aggressive or violent behavior and epilepsy, with particular regard to the role of post-ictal psychosis.

This presentation will impact the forensic science community by providing understanding of the relationship between aggressive or violent behavior, epilepsy, and psychotic disorders with the aim of improving knowledge and prevention.

Aggressive behaviors occur in many different circumstances in society, and patients with epilepsy are not immune to being involved in aggressive acts. However, erroneous beliefs and prejudices linking epilepsy with violence have disproportionately emphasized the nature of this relationship. This notion acquired a highly stigmatizing value in the late 19<sup>th</sup>-century when the criminologist Cesare Lombroso promoted the association of epilepsy with aggressive sociopathic tendencies on the basis of degenerative theory. These distortions aggravate the psychosocial stigma already associated with epilepsy and have led to the questionable attribution of epileptic seizures in some cases of violent crimes or episodic aggressive outbursts.

Even today, the erroneous conviction that epileptic patients should be prone to violent actions and aggressive behavior represents a controversial subject especially in the field of forensic psychiatry.

While it is unclear that patients with epilepsy exhibit increased aggression, aggressive acts have been seen in association with seizures themselves. The prevalence of aggressive behavior in epilepsy has a rate that goes from 5% up to 50%. This significant variance depends on the different kind of sampling of patients.

Based on temporal relation of the crises, there are three different types of aggressive behavior: ictal aggressiveness, post-ictal aggressiveness, and inter-ictal aggressiveness. Most commonly, aggression may occur in the post-ictal state and can even be seen hours to days after initial periods of confusion. In particular, post-ictal violent behavior may be seen in association with Post-Ictal Psychosis (PIP).

PIP is characterized by a cluster of seizures, followed by a lucid interval, followed by the sudden eruption of a clinical disorder with a mixed affective picture, often accompanied by religious delusions and fear of impending death, lasting usually a matter of days. Episodes of PIP are comparatively common and could be dangerous, though (fortunately) are often treatable.

The following case presentation is representative of a violent act during an episode of PIP. A 29-year-old single Caucasian male was arrested and charged with attempted murders. He allegedly assaulted his mother and his brother with a knife. In the anamnesis, he had a 20-year history of paroxysmal episodes of "blacking out." At age 12, episodes of loss of consciousness began to follow these attacks. As he aged, the seizures increased in intensity as well as frequency, despite maximum drug therapy. At age 25, the first manifest post-ictal mental derangement occurred, after several bouts of untreated seizures. Thereafter, his post-ictal episodes recurred two times before the arrest, because he decided to stop the medication.

A few days before the crime, he experienced two grand mal seizures followed by the onset of multiple religious and persecutory delusions, thought broadcasting, feelings of being controlled by others, and command hallucinations. Because of a belief that the world was going to end, he left the house where he had been living and went to his parents' home. During the night, he woke up with a sensation of being persecuted by his mother and brother. He heard God and Satan arguing. God screamed, "No!" Satan bellowed, "They deserve to die." The two voices roared at each other, becoming one horrible overwhelming command, "Do it!" Fortunately, the intervention of neighbors saved the victims' lives. From a psycho-legal point of view, he was found not guilty on the grounds of insanity.

In light of the case presented, it is important to highlight that the assessment and management of violent behaviors in the patient with epilepsy requires careful consideration of several factors: whether the act is directly related to the epileptic seizure, a feature of post- or pre-ictal mental state changes, or a function of other conditions that increase the risk of aggressive behavior. Evaluation also requires appreciation of the patient's mental state and the social context in which the violent act occurs.

In the case of psychotic episodes, it is particularly crucial for the prompt identification of the relationship between the disorder and epilepsy, because patients should be treated differently according to the various pathophysiologic backgrounds, and because, in case of PIP, the most powerful and effective recipe for controlling the risk of violent behaviors is seizure reduction or elimination.

**Epilepsy, Post-Ictal Psychosis, Violence**