

CASE REPORT

Interictal Psychosis – A Case of Psychosis of Epilepsy

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Abstract

Epilepsy and mental disorder are comorbid with each other, due to altered cerebral functions. Around 19 to 52 percent of adult patients with epilepsy have psychiatric disorders such as depression, anxiety, psychosis and cognitive and personality changes. This case report recognizes the risk factor for development of psychosis, so clinicians should be vigilant for psychosis in patient with epilepsy. It is also called schizophrenia like psychosis or psychosis of epilepsy and it is under-recognized and under-treated, in child and adolescent patients. Here we present a case of epilepsy presenting with schizophrenia like symptoms and improved with both antipsychotics and antiepileptic.

Keywords: Epilepsy, Psychosis of epilepsy, Schizophrenia like psychosis.

INTRODUCTION

Epilepsy is most common neurological disorder around the globe. It has been seen that patient with epilepsy have an increased risk developing a psychosis (1), depression, personality disorders, hypo sexuality, and other behavioral disorders. Both are comorbid with each other (2). The association between epilepsy and psychosis came into attention since nineteenth century even though many aspects of this relationship still remain controversial and there was considerable uncertainty regarding its direction. Kraepelin, identified the most of psychiatric disorders of epilepsy that can be presently recognized. He had observed that all psychiatric changes manifesting in the preictal and postictal phases may also occur interictally and independent of convulsive events (3). Psychosis is a complex psychopathological phenomena disorder with regard to phenomenology,

etiology and prognosis and widely accepted as a complication of epilepsy. Comorbid psychiatric disorders are particularly common in temporal lobe epilepsy or complex partial seizure whose occurrence cannot be directly linked to the ictus. The presence of psychotic symptoms in people with epilepsy can be evaluated by investigating the temporal relationship of symptoms to seizure activity. Chronic interictal psychosis, a syndrome sometimes referred to as the 'schizophrenia-like psychosis' of epilepsy, this term was coined by Slater et al. It was considered interictal as episode occurred when the patient was seizure-free or even when the patient was in between habitual seizures with no distinct preceding seizures (4).

Swiss neuro-psychiatrist Heinrich Landolt coined the term 'forced normalization' in the 1950s to describe occurrence of psychotic episodes associated with the remission of seizures and disappearance of epileptiform activity on electroencephalograms (EEG) in individuals with epilepsy and EEG becomes more normal or entirely normal. He also identified the relationship of transient psychotic episodes, seizures and electroencephalogram (5, 6). Friedrich Hoffman a researcher introduced the term epileptic equivalents for mental disorders in epilepsy and identified that epilepsy and mental disorders often develop into one another. Slater and Beard in their article

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on schizophrenia like psychosis of epilepsy proposed the presence of association between seizures and psychosis. The psychoses of epilepsy can be classified according to their temporal relationship with seizures, namely as ictal, postictal and interictal psychosis. Interictal psychosis is the most common seen disorder and it may be lookalike schizophrenia. Schizophrenia has a point prevalence of 0.4 percent to 1 percent in the general population but this risk increased to 5.6 percent among patient with epilepsy (7, 8). According to International Statistical Classification of Diseases and Related Health Problems (ICD-10), schizophrenia-like psychosis is a morbid state in which persistent or recurrent delusions, hallucinations, thought disorder, or a limited number of severe behavioral abnormalities may be present in clear consciousness (9).

Epilepsy affects emotional, behavioral, social, and cognitive functioning. Psychiatric and cognitive disturbances are relatively commonly seen in epilepsy (9). According to research conducted among epileptic patients, most important predictive factors for occurrence of interictal psychosis are positive family history, epilepsy with early onset, complex-partial seizures or generalized epilepsy, and borderline intellectual development (10). Patients with interictal psychosis always show a significantly earlier age of onset of epilepsy, Slater et al have shown a mean age of onset of epilepsy of 15 years (11). Trimble et al have shown a mean age of onset of epilepsy of 11 years (12) Increased frequency of seizures at onset was associated with higher risk of interictal psychosis. Around 88.58 percent of patients had duration of epilepsy more than 5 years indicating the occurrence of psychosis is more commonly associated with chronic long standing epilepsy and 31.42 percent of patients had features suggestive of alternative psychosis with decreased frequency of seizures with onset of psychosis (13). Most of the patients with interictal psychosis had chronic seizures and were on more than one antiepileptic drug.

CASE PRESENTATION

A 25-year-old, married female patient was brought to our psychiatry outpatient department with complaints of suspiciousness, hearing voices of someone talking to her, seeing things which others could not see, increased irritability and her behavior is abnormal, facial grimacing since 6 months. She had past history of impaired consciousness 10 years back during morning. It is associated with repetitive movements like crying

and sometime screaming loudly, also seen lip smacking and suddenly removing her clothing. She also performs coordinated movements such as cycling her legs. She is staring blankly into the space, appear to be day dreaming. It lasted one to two minutes. After this episode she became fatigued, disoriented and confused. She was taken to neurologist and diagnosed as case of complex partial seizure. She was started on antiepileptic drug valproic acid 500 mg and slowly increased up to 1500 mg per day. She took medication around two to three years. Then she stopped medication on her own because she has no episode of epileptic fit. She had family history of epilepsy in her brother and no history of substance abuse and psychosis.

On examination patient is calm, conscious and cooperative, no abnormality is detected on her general and systemic examination. All routine baseline investigations were within normal limit. Electroencephalogram was done and no abnormality was detected. Mental status examination revealed poverty of thought, blunted affects, delusion, and second person auditory hallucination, with below average memory and low cognition with partial insight. A computed tomography scan and magnetic resonance imaging of brain found to be normal. The patient was seizure-free around 10 years.

She was diagnosed as a case of interictal psychosis. Initially she was put on sulpiride 200 mg per day and no improvement was observed. Then she was added on risperidone 4 mg per day with benztropine 2 mg daily along with valproic acid 1500 mg per day. On subsequent follow up after two weeks we found improvement in her symptoms and later complete improvement on her psychotic symptoms was seen after one month, then no more tonic-clonic seizure are seen.

DISCUSSION

In our case important predictors for development of interictal psychosis is early age of onset of epilepsy around 15 years of age, another predictor is chronic long standing epilepsy for 2 years, then seizure free period is around 10 years, psychosis was most often schizophrenic in nature with thought disturbances, auditory and visual hallucinations. No lesion was found in temporal bone in brain imaging. Psychiatric negative symptoms, such as, psychomotor retardations, blunted affect, and emotional withdrawal is seen, complex partial seizures is the predominant seizure type in our patients, psychotic episodes can also develop when seizures are infrequent or fully controlled with acute onset, the prognosis

was better, Psychotic symptoms occurred after onset of epilepsy, Psychotic phenomena occurred in clear consciousness, there was family history of epilepsy so we diagnosed as a case of interictal psychosis.

Psychotic disorder in patients with epilepsy are always overlooked, and mistreated. The patients with a history of taking antiepileptic drug previously and later seizure free from long period are more vulnerable to the development of psychoses. In such cases there is a disturbance of monoamine metabolism, and speculated that an increase in central dopamine activity so there are chances of developing psychoses. Valproic acid (VPA) to provide superior seizure control in the patient with complex partial seizure so we continued in our patient. Controversial findings were found regarding VPA, when associated with antipsychotics, indicating both an increase and a decrease in the plasmatic concentration of antipsychotics. VPA in interictal psychosis is benefited as a mood stabilizer effect. In our case it is rare that interictal psychosis delivers after 10 years from seizure.

Sulpiride is a selective dopamine D2 antagonist with antipsychotic and antidepressant activity and in particular has significant anxiolytic effects is useful for the interictal psychosis. It may be used in low doses to reduce the anxiety, agitation and emotional lability that manifest in the stage of evolution. During acute exacerbations of psychotic behavior, risperidone, olanzapine, or quetiapine may also become necessary to treat it. In our case we used sulpiride and risperidone to reduce anxiety, emotional lability and psychotic symptoms like suspiciousness and hearing voices. Sometimes, exacerbations of interictal psychosis are prolonged and nonresponsive to treatment in such situation clozapine may be needed to be introduced.

CONCLUSION

Psychiatric comorbidities in patients with epilepsy are frequently seen. Patient with epilepsy and comorbid psychiatric disorders are always stigmatized in the

society. Due to social stigma, generates a hidden burden on them, which discourages from seeking the treatment. Early recognition of psychiatric illness and proper management in patients with epilepsy is very important, because it improves the quality of life and better seizure control. A family history of epilepsy, earlier age at onset of epilepsy, complex partial seizures and borderline intellectual functioning were the most important predictors for development of interictal psychosis.

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