

## Bipolar Mood in Seizure Disorder: A Case Report

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Seizure disorder and bipolar mood disorder are increasingly speculated to have common neurobiological substrate.<sup>1,5</sup> Seizure disorder may also be associated with psychological, emotional and behavioral disturbances.<sup>3,8,9,10</sup> Affective disorders, especially depression, are frequently seen in epilepsy, depression is found in 7.5- 25% of epilepsy cases.<sup>1,2,4</sup> Sometimes, the emotional picture of seizure disorder resembles the syndrome of functional affective disorder, making the diagnosis complicated and confusing. Mania or mixed or bipolar mood is much rarer than depression.<sup>1,6</sup> Seizure with foci in right temporal lobe is more associated with manic picture whereas it is inconclusive regarding association of depression with left temporal lobe foci of seizure.<sup>1,3,6</sup>

Here is a case which confused clinicians, sometimes with depressive picture, other time with manic and next

Seizure may be associated with psychological, emotional and behavioral disturbances making the diagnosis confusing. Here is a case presented with rare manifestation of seizure i.e. organic mood disorder akin to bipolar mood.

A 23-year old lady presented with an episodic illness of 4 month duration. She had features of increased worry, low mood, tiredness, decreased interest and concentration, heaviness of head and ruminating thoughts for 2-3 weeks followed by derealisation, depersonalization and an episode of unconsciousness, with confusion lasting for 3-4 days near a menstrual period. She improved with 1 week use of clonazepam and amitriptyline, given with a diagnosis of “depressive episode” with dissociative spells.

Near next menstruation, her symptoms manifested as talkativeness, labile mood, increased energy and activity, decreased sleep and appetite, suggestive of “mania”. Additionally, she had echolalia, alternating periods of confusion, amnesia, disorientation, and startling for about a week.

On the basis of electroencephalography (EEG) and computerized tomography (CT) of head, epilepsy was diagnosed and sodium-valproate was started with which she improved.

**Key Words:** anti-epileptics, bipolar mood, depression, mania, seizure

time with psychotic state. And, it ultimately turned out to be seizure disorder leading to syndromal mood picture (bipolar mood).

In such cases with psychopathology related to seizure, it should primarily be treated with antiepileptic drug with favorable effect on mood and behavioral problem.<sup>1,5,7</sup> This case has been presented because of its rarity and management issues.

### Case report

A 23-year old unmarried female was brought to emergency room for behavioral problems, disturbed sleep and labile mood for 4-5 months. She was fine till 5 months prior to her first visit to emergency. One day, the daughter of house owner misbehaved her. Because of altercation and threatening, she had to change the room. Subsequently,

she was less interested in and could not concentrate on study. She was worried and sad. Her sleep was disturbed, she used to get up early in mornings without refreshness. She felt heaviness of head almost every day. Appetite was poor. She used to get tired easily, could not enjoy and was less interested in her activities. She started unusually remembering many dead people and felt increased pity on insects, like ants. She used to have occasional severe headache associated with menstruation. It was also associated with unusual feeling of self (depersonalisation) and surrounding (derealisation). Later, she had other more confusing features. She felt as if she were forced to think, she had a series of thoughts about dead people and guilt of visiting a social gathering during period. She was so much disturbed by the dragging thoughts that she felt dizzy and confused.

In between headaches, once she fell unconscious for about 3 hours. She was confused and did not recognize people intermittently for 3-4 days (also in emergency room). After psychiatric consultation, she was given amitriptyline and clonazepam for depression with dissociative symptoms and headache. She stopped them after 1 week on her friends' advice. By then, headache, confusion and unresponsiveness abated but other features such as listlessness, tiredness, loss of interest, heaviness of head, anorexia and early morning awakening with lack of refreshness persisted.

Just prior to another menstrual cycle, she began to feel depersonalisation and derealisation again. Continuing with the symptoms, contrary to last episode, she was restless, fearful, used to startle on noises; more energetic, trying to move around, difficult to control; talked more, used to repeat same sentences or words of others (echolalia), used to laugh, cry or become irritable on being prevented on her way. Sleep was disturbed, she used to talk, mostly of dead people, repeat others' sentences or shout at nights. As the condition did not improve with a week of traditional treatment, she was again brought to emergency department. A psychiatrist on-duty prescribed Olanzapine and advised EEG. The document revealed the impression of Bipolar mood and called for detail work-up in OPD following day. She was taken to a private nursing-home since it was very difficult to control her. She was discharged in a good condition and remained asymptomatic for about 18 days.

Like before, near another period, she developed symptoms of derealization and depersonalization; forced thinking about dead people after a dream of being chased by a dead person; disturbed sleep and decreased appetite and echolalia and verbal stereotypy. When she came into consciousness, she remembered to have similar headache at times. This time, she was more fearful, even with her own shadow. In fear, she used to run for a distance and then to return. While doing so, she was at times noticed to bump on the things on way. She was admitted this time from emergency for diagnostic clarification and management. During mental-state examination she was uncooperative and usual mental state examination was not possible in

emergency. She was not concerned about and did not recognize place and people, even her father. She grabbed the cloth of doctor when approached. She was constantly trying to move out, did not explain anything about her behavior, did not comprehend most of time and repeated same sentences of the interviewer (echolalia). She spoke in low volume, in haste and in monotonous voice. She was restricted, did not seem to change her facial expression during sensitive issue. She remained unconcerned on the interviewer's request to write.

She was advised for CT scan-head and EEG, and was prescribed Olanzapine and SOS chemical restraint with injectable Haloperidol and Promethazine.

Investigation reports revealed normal findings on complete and differential blood counts, random and fasting blood sugar, urea, creatinine, liver function tests, electrolytes, and thyroid function tests. CT Head showed calcified granuloma in right temporal region and EEG indicated post- ictal dysrhythmia.

## Management

With EEG and CT scan reports, Sodium-valproate was started and there was a gradual improvement. During hospital-stay, she had 4-5 day symptoms of upswing of mood, increased self-esteem, over-activity, over-familiarity and increased talkativeness, suggestive of hypo-mania. It improved with optimization of Olanzapine and Sodium-valproate. She was significantly better when discharged. She was on tablet Sodium-valproate 1200mg/ day. She was fine on regular follow-ups and resumed her study later.

## Discussion

Seizures may present with various psychiatric signs and symptoms.<sup>1,2,5,9,10</sup> If a disorder can be made in the background of seizure activity, the ICD-10 subsumes under the 'Organic disorders', to be specified according to predominant clinical picture. If psychotic symptoms predominate, it defines it as organic psychotic disorder; if mood, organic mood; if anxiety, organic anxiety, etc.<sup>11</sup> These symptoms and signs may appear prior to seizure episodes, in between the attacks (inter-ictal), or even after the seizure episodes (post ictal).<sup>3</sup> The literature supports the manifestation/ association of seizure with depressive picture in many cases. Some of the seizure patients have been reported to be presenting with elevated, labile or irritable mood; increased energy, esteem, religiosity, self confidence; over-familiarity, decreased need of sleep, rushing thoughts, etc: picture akin to mania or hypomania.<sup>2,4</sup> Though the picture simulates, the experience was found to be fragmentary and atypical most of the time. When these psychiatric symptoms appear in seizure cases, they may be associated with other features of seizure, like headache, derealization, depersonalization, altered consciousness, amnesia, etc as in this case.<sup>6</sup> Transient

association is common whereas the episodic manifestation of bipolar mood is rare.<sup>1,5,6,9,10</sup> Though rare, this case gives the impression that bipolar mood may be the manifestation/association in seizure disorders.

When a psychiatric disorder (symptoms) develops in seizures, it poses a challenge in management.<sup>7</sup> The primary strategy would be the control of the seizure itself. While selecting anti-epileptics and other agents like antipsychotic, the one with mood stabilizing effect should be the choice in cases with mood pictures.

Other consideration is to select the psychotropic with the least seizurogenic effect, if the clinical picture warrants the use. Another equally important precaution is about the possible drug interactions while using antiepileptic with other psychotropic.<sup>1,5,7,10</sup>

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