Self-injurious behavior in epilepsy

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Self-injurious behavior (SIB) can be described as an act involving self-inflicted destruction of tissue, right away or over a period of time. Patients with epilepsy have to deal with an often chronic and unpredictable disorder leading to adversity in many psychosocial variables such as employment, stigma, and overall quality of life. The above factors contribute toward SIB in these patients. Behavioral problems occurring in people with epilepsy can range from aggressiveness, mood fluctuations to SIB. We report a 23-year-old male, married, educated up to 10th standard, referred from neurology department for psychiatric evaluation. The patient had gone to neurologist with the chief complaints of generalized tonic–clonic convulsions and was hospitalized for breakthrough seizure. There was a history of indulging in episodes of self-SIB since the past 8 months. He responded satisfactorily to adjustment of antiepileptic medication along with fluoxetine and low-dose risperidone. Early identification of such behavior in epilepsy patients should be done so that a holistic management is undertaken leading to better functioning and improved quality of life.

Keywords: Epilepsy, generalized tonic–clonic convulsions, self-injurious behavior

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elf-injurious behavior (SIB) can be described as an act involving self-inflicted destruction of tissue, right away or over a period of time. Kahng et al. described the types of SIB as head hitting with objects or hands which was the most common and seen in 49% of cases, followed by biting oneself (30%), pica (7.8%), scratching the body (5.7%), pulling of hair (4.5%), hitting the eyes (4.2%), picking of skin (2.3%), and bruxism (0.7%).[1] Behavioral problems are more commonly seen in individuals with epilepsy when compared to the general population and range from aggressiveness, mood fluctuations to SIB.[3] The most frequently described are as of the body involved in SIB were hands (48.58%), mouth (28.99%), and head (23.19%).[3] Although SIB has been reported across a spectrum of psychiatric disorders, at times, it is also seen in persons with no psychiatric disorders.[4] There is a longstanding and controversial association between epilepsy, impulsivity, and aggression.[5] Impulsivity has been seen in epilepsy patients, more so in those suffering from juvenile myoclonic epilepsy.[6] These traits have been theorized to be present on the pathway to suicidal tendencies, according to the “stress diathesis model.”[7] Epilepsy patients have to deal with an often chronic and unpredictable disorder leading to adversity in many psychosocial variables such as employment, stigma, and overall quality of life.[8] These factors may contribute toward SIB in these patients. Males have been found to be especially over-represented in such circumstances. It has been seen that the young men with epilepsy are particularly handicapped, in a social sense.[9] Therefore, the World Health Organization recommends that epilepsy patients should be inquired about presence of any self-harming thoughts or behaviors in various circumstances.[4] Here,
we present a case of a 23-year-old soldier, suffering from epilepsy who presented with self-injury.

CASE REPORT

A 23-year-old male, married, educated up to 10th, soldier was referred from neurology department for psychiatric evaluation. The patient had gone to neurologist with the chief complaints of generalized tonic–clonic convulsions since 2015 and was hospitalized for breakthrough seizure. Psychiatric referral was made due to history of episodes of SIB since the past 8 months. The patient was apparently all right in 2015, when during his 10th standard, he developed episodes of tonic–clonic movements of body with tongue bite, incontinence of urine with postictal confusion. He was treated by a civil neurologist but he continued to have breakthrough seizure in the form of sudden jerky movements of both hands. He claimed he had continued with antiepileptic medications after joining the service. His colleagues noticed that he had reduced alertness and he also continued to have intermittent jerky movements in limbs. Since the past 8–9 months there were gradual changes in his moods in the form of increased irritability. He had been indulging in SIB which included banging his head against the wall, slapping his face, and biting his hands and forearms. These episodes of biting were mostly at night and he would come to know next morning due to the pain. Once he had also bitten his wife’s hand at night. He reported having irresistible urge to bite his body whenever under stress. Whenever he was under stress he could not control himself. On seeing blood from the skin, he would get relaxed a little bit giving rise to tension relief cycle. There is no intent of dying during any of these times. He had problems in domestic sphere due to his symptoms. He reported decrease in his problem solving capacity and frustration tolerance. There was also a history of low mood, loss of confidence, unable to enjoy even positive events, preoccupation with his illness, and apprehensiveness about another breakthrough seizure. The patient denied any substance use on regular basis though he occasionally consumed alcohol on social occasions. There was no past or family history of any psychiatric or any other physical disorder.

On physical examination, vitals were stable. He had freshly oozing lacerated wound on dorsum of right hand and healed wounds on both forearms [Figures 1-3]. On mental status examination, he was kempt, co-operative, and communicative, in touch with reality. Speech was relevant and coherent, mood was irritable, affect was reactive and appropriate. He denied delusions or active suicidal ideas. Recurrent thoughts and urges of self-harm were present. No perceptual abnormality. Insight was present and judgment was intact. MRI head and EEG were within normal limits. His score on Beck Depression Inventory was 20 indicating moderate level of depression. On Beck Anxiety Inventory, his score was 5 indicating minimal level of anxiety. On Becks scale for Suicidal ideation, his score was 0.
He was diagnosed and managed as a case of other mental disorders due to known physiological condition (ICD-10 code: F 06). He was treated with capsule fluoxetine 60 mg, tablet risperidone 2 mg for behavioral control, short course of anxiolytics to reduce anxiety along with behavior therapy techniques. He was taught problem solving approaches, adaptive and mature coping skills. He was educated about the nature of his illness and the need for regular drug compliance and adherence to treatment. He was also educated about the early features of relapse of his illness. The antiepileptic medication advised by physician tablet divalproex sodium 500 mg three times a day and tablet clobazam 10 mg at night were continued. He has shown a satisfactory response and is regular on follow-up for 1 year.

DISCUSSION

Our case describes a soldier; suffering from epilepsy who presented with SIB and highlights the problems that individual with epilepsy may have to deal with.

The most common areas affected by SIBs in epilepsy patients are the hands, mouth, and head, probably because these body parts are easily injured due to self-biting or self-hitting with hands or other objects. This was also seen in our patient. In agreement with the findings in the present case, SIBs are often observed in close time relation to episodes of high emotional arousal, anger or fear. All of the latter are gross disorders of emotion commonly seen in temporal lobe epilepsy. Episodes of SIB in the context of temporal lobe seizure are usually not recalled by the patient. Our patient was also unable to recall the episodes of SIB. When challenging behaviors fail to respond to antipsychotic medication but respond to anticonvulsants, physicians would do well to suspect an underlying seizure disorder.[10] Our patient had been having break though seizures along with SIB and responded to adjustment of anticonvulsants along with fluoxetine and low-dose risperidone so it is difficult to comment on this aspect.

Clinicians should keep in mind a differential diagnosis of Kluver–Bucy syndrome as these patients may also self-injure occasionally.[11] Some of the drugs used to treat epilepsy may have psychiatric adverse reactions causing mood and behavioral changes in at risk people, especially those with a previous episode of psychiatric disorder.[12] A longitudinal study involving 339 epilepsy patients and 678 age- and sex-matched controls followed to a median age of 24.7 and 23.4 years respectively reported 98 subjects (43 epilepsy patients and 55 control subjects) with SIB or suicidal ideation. They concluded that children, teens, and young adults with epilepsy were at higher risk of self-injury.[13] Shakya et al. showed that SIB or self-mutilating behavior is rare but can occur in temporal lobe epilepsy. They reported a 19-year-old male who presented to emergency with self-injury, guilty rumination, and delusion of persecution and was treated with antiepileptic and antipsychotic medications.[14] Hence, prompt diagnosis and treatment of SIB in epilepsy patients should be done so that a holistic management is undertaken leading to better functioning and quality of life.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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