Abstract

Background: Temporal lobe epilepsy with prevalence of 0.003 is the most common type of epilepsy in adulthood. 20-60% of these patients have psychiatric comorbidity and 30% of them have a history of admission in psychiatric hospitals, before referring to neurologist. Case presentation: The case is a 22 years old, single and high school educated man who developed his first epileptic episode four years ago when he was student in spiritual sciences center, so he was captured and suspended his education because of sexual manifestation of epilepsy. Then he was referred to a psychiatrist for management as a case of psychiatric illness but there was no improvement after one year of psychopharmacotherapy and following a suicidal attempt he was admitted in hospital and took ECT with the impression of mood disorder but in outpatient service follow up he talked about the true nature of his problem and in a case conference session with the presence of psychiatrists and neurologist, we noticed that he is a case of epilepsy that his epileptic episodes usually occur in public places, 2-3 times in a year, no matter what is the victim sexuality. Each episode lasts about few minutes with postictal confusion and the patient has no memory about the episodes. Between the episodes the patient suffers from anxiety and depression. EEG was abnormal but brain CT scan and MRI with contrast were normal. After antiepileptic management the patient had no epileptic episode during one year follow up period. Conclusion: evaluation of sexual manifestation in the context of anxiety and depressive state need more consideration because it could be a distinct entity rather than a psychological manifestation.

Introduction

Temporal lobe epilepsy (TLE), with prevalence of about 3 in 1000, is the most common type of epilepsy in adult. Epilepsy has high comorbidity with psychiatric disorder, as 20 to 30 % of them have psychiatric problem. The most documented comorbidity is between epilepsy with depression and dysthymia. About 30% of epileptic patients who refer to clinics have past history of psychiatric admission. It is stated that around 18% of them use one psychotropic drug. In patients with epileptic focal area in temporal lobe show higher prevalence of depression(Sadock , Sadock , & Ruiz,2009 , Sadock,&Sadock, 2007, and Gelder , Harrison , &Cown ,2006 ). Genital and sexual manifestations are rarely observed in focal seizures. In according to Leutmezer, these manifestations can be divided in sexual auras, sexual automatisms, genital auras, and genital automatisms. The adjective “sexual” refers to the signs and symptoms with erotic content while the term “genital” refers to the signs and symptoms involving genitals without erotic components (Dobesberger, Walser& et al ,2004 ,Mascia , Di Gennaro& et al, 2005, and Aull-Watschinger,
Pataraia & Baumgartner, 2008). Hyper motoric movements in hip and trunk are most likely seen in the frontal lobe epilepsy while genital automatisms are more common in the temporal lobe (Mascia, Di Gennaro & et al, 2005). This study presents a case of temporal lobe epilepsy with sexual presentation.

Case Presentation

A 21 year-old man, single, senior high school level of education, was referred to the psychiatric clinic with complaint of sadness and worry.

He mentioned that his disease started about 4 years ago, when he was in seminary. The patient complained of anxiety, depression, impatience and irritability that made him unable to study. In addition, his family stated that his behavior has been changed significantly and showed depression, impatience, irritability, aggression, social withdrawal. In addition he was avoiding from going out and to participate in family gatherings. With primary diagnosis of major depressive disorder and impulse control disorder, Imipramine, Fluoxetine, lithium, and carbamazepine were prescribed. A year later, he had a suicidal attempt, admitted to a mental hospital and received ECT. During follow up visits in mental clinic, he showed depressed mood and sometimes mild elated mood with inordinate preoccupation about masturbation and guilt feeling consequently. He also punished himself by shaving hair of the head and self-beating. The anxiety and depression decreased, to some extent, after using medication.

About six months later, his complaint was sexual attack in outdoors, the reason that he was fired from seminary. His first attack was in a crowded street and he was arrested after that.

During the attack, first he develops oversalivation while hearing a sound of repast and then spites to his victim. Meanwhile he is pushed away by his victim and finally leaves the place while he is perplexed. Attacks last about one minute and he is unable to remember any part of the episode. He did not have erection or ejaculation in his attacks. Frequency of attack is 2 to 3 times in a year and all are happened in the public area. The victims were of both genders.

Brain CT scan was normal but EEG was abnormal. The case was presented in a case conference with attendance of neurologists and psychiatrists and the final outcome of this session was the diagnosis of TLE with sexual presentation for this patient. He was treated with anticonvulsants medication. During management period EEG was gradually became normal.

Anxiety and depression were under control and he got back to normal function. However, when he refused to use his medication, the signs and symptoms were returned.

The case is the sixth child of his family with negative past medical history. siblings are high educated, married and employed and do not have any history of epilepsy or psychiatric disorder.

Discussion

As mentioned in previous parts, the case is a psychological one and multifocal epilepsy with genital manifestation as a co morbidity. There is an aura in pre ictal phase and the patient has confusional state in post ictal phase. The case refers to psychiatric clinic with complaint of anxiety and depression ended to suicidal attempt and hospitalization. The point is that the epilepsy becomes as a complaint after management of depression and anxiety and it was completely managed with antiepileptic medication.

In a study by Dobesberger and her colleagues, 207 patients were studied. 135 patients had TLE and 23 cases of them (17 men and 6 women) had genital automatisms that all of them have no memory about their epileptic activity. Not any case had orgasm during seizure and not any man had erection or ejaculation. 12 cases out of 23 had automatisms in ictal phase, and 11 cases in post ictal phase. All 12 patients who had intrarictal genital automatisms diagnosed as TLE case and 9 cases out of 11 who had postictal genital automatisms, while 1 case had frontal lobe
epilepsy and 1 case had generalized seizure. In this study, majority of genital automatisms were the manifestation of temporal lobe epilepsy and most of the cases were male. (Dobesberger, Walser & et al, 2004)

In other study done by Mascia and his colleagues, genital and sexual presentations of refractory seizures were evaluated. Out of 212 cases of refractory seizure surgery, 24 patients including 21 men and 3 women who were candidate for surgery, 11.3% had ictal genital and sexual presentations. 23 cases had TLE and 1 case had frontal lobe epilepsy. Only 3 patients had rhythmic hip movements that two of cases had TLE and the other one had frontal one. (Mascia, Di Gennaro & et al, 2005)

Mechanisms of genital automatisms are not completely clear. But the role of temporal lobe in human sexual behaviors suggested by KluverBucy, has been confirmed later in patients who had severe damage to temporal lobe. Similarities of epileptic genital automatisms and sexual behaviors in KluverBucy syndrome introduced a temporary functional impairment due to intra or postictal epileptic activity in both temporal lobe. EEG of our patient showed disturbances in right temporal lobe that disappeared with anticonvulsant therapy. one year later with discontinuation of treatment and returning of attacks, dysrhythmia came back in EEG but with less severity.

Epilepsy and sexual activity have relationship in several ways. Seizure may occur due to hyperventilation along sexual activity. Sometimes sexual stimulants can cause reflective seizure. (Chuang, Li, & et al. 2004)

As long as, in this case, the seizure develops in public area, it might be reflective type that occurs following sexual excitement.

Conclusion

Multifocal epilepsy especially with sexual presentation may provide information about pathophysiology of temporolimbic structures. Clinician should consider that TLE may present with genital and sexual presentation. These patients may complain of other psychological symptoms except their chief complaint.

References


