

# Dancing With the Waves: A Case Report

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## Abstract

This case presentation describes a 19 years old female presenting with episodes of abnormal behavior in the form of singing and dancing. We assessed her mental and physical status as well as fully investigating her condition. She was diagnosed as Frontal lobe epilepsy and had shown good response to Lamotrigine.

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## *Index terms*—

## 1 Introduction

Epilepsy is the most common serious neurological condition with a varying degree of impact on patients' lives. Its prevalence is around 5-10 per 1000, slightly more common in males than females. The complexity of the disorder in the form of varying symptoms and underlying brain pathology makes the diagnosis and management challenging at times. Clinicians should always bear in mind such diversity of presentation so as not to miss such cases.

## 2 II.

## 3 The Case

Our current case is a 19 years old female with 3 years history of episodes of change in behavior. The episodes constitutes of singing loudly, clapping of her hands and humming a musical tone. There was laughing and dancing as well. Each episode lasts ½-1 minute, ending suddenly, leaving the patient very low thereafter. These episodes were not provoked and not preceded by an aura. They were occurring about one to two times per week. Her social life was significantly affected by these episodes.

The episode was witnessed in our outpatient clinic. Of course most of the attendants were shocked by such a behavior considering her cultural background. During the episode she is conscious about the behavior but cannot stop it. No associated incontinence or tonic clonic seizures.

Between the episodes she is quite normal with good sleep and appetite. She has no psychotic or obsessive features, and her mood is reactive except for some degree of anxiety concerning her condition.

Family history & past medical history were uneventful: there was no past history neither of serious medical illness, febrile convulsions or head trauma. The patient was not on any medications.

As regard her personality, she was known to be generally cheerful with many friends at school. She had a stable academic performance.

Author ? ? ? : Behavioral Medicine Department, College of Medicine& Sultan Qaboos University Hospital, Sultan Qaboos University, Muscat, Oman. e-mail: amrguedi@hotmail.com a) Mental state examination i. Appearance & behavior She was a well-dressed young lady. She was cooperative with good eye contact. There were no abnormal movements (except those during the attack). Speech: her speech was coherent, of normal, rate and rhythm ii. Mood Her mood was reactive.

## 4 iii. Perception and thinking

There were no illusions or hallucinations, no depersonalization or derealization, there were neither delusions nor obsessive thoughts. A wake EEG did not reveal any abnormality but a Sleep EEG showed epileptic form

43 discharges on the frontal regions. She was started on Lamotrigen and the dose was built up to 50mg BD with  
44 good response. After six months she presented with increase in the number of episodes associated with urinary  
45 incontinence.

46 The dose of Lamotrigen was increased to 100mg BD with good control. She was followed in OPD with good  
47 control.

48 After 2 years of being symptom free, the dose of Lamotrigen was gradually reduced till it was totally stopped.  
49 This was followed by an EEG, which was reported as normal.

50 It's worth mentioning that during the period of treatment her scholastic achievements were constant.

### 51 **5 III.**

### 52 **6 Discussion**

53 The Frontal lobe is divided into three main parts. The Premotor Area which plans any type of Movement, Motor  
54 area which executes the movement and the Prefrontal region where functions like mood, emotions, Behaviour  
55 as well as some cognitive functions are harbored. Frontal lobe epilepsy is an abnormal discharge in the frontal  
56 region leading to partial or generalized seizure activity. Because of the functions carried out by this part of the  
57 brain such abnormal activity can lead to a diversity of symptoms. These can be motor, behavioral or both. The  
58 differential diagnosis thus includes psychiatric disorders as well as medical organic causes. Hence neurologists  
59 and psychiatrists may be faced with such exercise in diagnosing Frontal lobe epilepsy {4}.

60 In our case the nature of the symptoms, observing the symptoms with the disinhibition raised the suspicion  
61 of frontal lobe pathology. This is confirmed by the sleep EEG. The response to Lamotrigine was very good with  
62 almost no side effects.

### 63 **7 IV.**

### 64 **8 In Conclusion**

65 We reported a case with Frontal lobe epilepsy presenting with both behavioral and motor features. She was  
66 diagnosed after witnessing an episode in the clinic and performing a sleep EEG. She had shown good response  
to Lamotrigine.



Figure 1:

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- 68 [Neurology (1995)] , *Neurology* Apr 1995. 45 (4) p. 780.
- 69 [Knake et al. (2005)] '3T phased array MRI improves the presurgical evaluation in focal epilepsies: a prospective  
70 study'. S Knake , C Triantafyllou , L L Wald , G Wiggins , G P Kirk , P G Larsson . *Neurology* Oct 11 2005.  
71 65 (7) p. .
- 72 [Fisher et al. (2005)] *Epileptic seizures and epilepsy: definitions proposed by the International League against  
73 Epilepsy (ILAE) and the International Bureau for Epilepsy (IBE)*. *Epilepsia*, R S Fisher , W Van Emde Boas  
74 , W Blume . Apr 2005. 46 p. .
- 75 [Ramaratnam ()] 'Lamotrigine add-on for drug-resistant partial epilepsy'. S Ramaratnam . *Cochrane Database  
76 of Systematic Reviews* 2001. (3) .
- 77 [So ()] 'Mesial frontal epilepsy'. N K So . *Epilepsia* 1998. 39 (4) p. . (Suppl)
- 78 [Semiology of epileptic seizures: a critical review S Noachtar, A.S. Peters *Epilepsy Behav* ()] 'Semiology of  
79 epileptic seizures: a critical review S'. *Noachtar, A.S. Peters Epilepsy Behav* 2009. 15 p. .
- 80 [The differential diagnosis of epilepsy: a critical review S Benbad is *Epilepsy Behav* ()] 'The differential diagno-  
81 sis of epilepsy: a critical review S'. *Benbad is Epilepsy Behav* 2009. 15 p. .
- 82 [Laskowitz et al.] *The syndrome of frontal lobe epilepsy: characteristics and surgical management*, D T Laskowitz  
83 , M R Sperling , J A French , O' Connor , MJ .
- 84 [Treatment Guidelines from the Drugs for epilepsy ()] 'Treatment Guidelines from the'. *Drugs for epilepsy* 2008.  
85 6 (70) p. . (Medical Letter)