

Intractable Psychogenic Nonepileptic Seizures

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Abstract: A 50-year-old female patient presented with complaints of fits for 1 week, 2 to 3 episodes per day lasting for 10 to 30 minutes. She is a known case of intractable seizures for past 14 years under irregular medication. Her computerized tomography(CT) brain and electroencephalography(EEG) were normal and complete neurological examination revealed, No Focal Neurological Deficit (NFND). She has a history suggestive of emotional disturbance. The characteristics of the seizures mimicked myoclonic jerks/ Generalized Tonic Clonic Seizures(GTCS) During the seizure episode she had clenching of teeth but no tongue biting was obvious.

I. Introduction

The incidence of psychogenic seizures is about 0.85% among normal population in developed nations. Psychogenic Non Epileptic Seizures (PNES) account for about 26% among the seizure population and 20 to 25% medically refractory seizures [1,3]. A normal EEG doesn't always rule out epilepsy and similarly abnormal EEG are not always conclusive of epilepsy. Not always epileptic seizures are mistaken for psychogenic seizures also called as pseudo-pseudo seizures. One should always bear in mind about the hystero-epilepsy common among the females of child bearing age [2] before arriving to a conclusion for diagnosis. Typical features of psychogenic non epileptic seizures include gradual onset, long duration, a waxing and waning course with disorganized an asymmetric motor activity. The events lack the stereotype of epileptic seizures because the pattern of symptoms and sequence of events vary between the seizures. Frontal lobe seizures and gelastic seizures(laughter) often are mistaken for nonepileptic seizures. [3]

Casehistory

We present a 50-year-old female patient who came with complaints of seizures for past 1 week to the OPD of Madha medical college and hospital. She is a known case of intractable seizures for 14 years under irregular anticonvulsant medication. She had a mentally disturbed history and multiple somatoform symptoms. Her CT BRAIN revealed no structural abnormality and her EEG was within normal limits. Complete general and CNS examination revealed no focal neurological deficit. During her period of admission in ICU she had 2 to 3 episodes of seizures per day each lasting for 5 to 15 minutes and mimicked myoclonic jerks. She was administered with fosphenytoin twice daily and midazolam during the seizure episode for which controlled her seizures partially and failed to sedate. She was later referred to Fortis malar hospital for epileptologist opinion where she had an EEG taken(fig-1) which was normal during sleep and awake cycles and was diagnosed with Psychogenic Non Epileptic Seizures (PNES). She was prescribed with escitalopram and clobazam once daily for a week after which she successfully recovered.

Fig – 1

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EEG REPORT

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Classification.

Awake : normal record
Sleep : no activation

Findings Interictal

Awake EEG record showed bilateral symmetrically distributed 9 Hz alpha activity over the both posterior head region with posterior slow wave of youth, reactive to eye opening.
Hyperventilation and intermittent Photic stimulation was not performed
Sleep activity symmetrically distributed.
There were no focal slowing and epileptiform abnormality noted in this study.

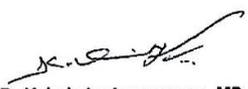
Interpretation.

Normal EEG record in awake and sleep.

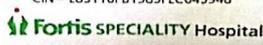
Kindly correlate clinically


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II. Discussion

Non epileptic seizures is defined as a transient alteration in behavior resembling an epileptic seizure but not due to paroxysmal neuronal discharges. **PNES** can occur without other physiological abnormalities or with probable psychological origin. Psychogenic Non Epileptic Seizures (**PNES**) are **classified** [2] into following categories namely,

1. Conversion

2. Dissociative
3. Somatization
4. Hypochondriasis
5. Misinterpretation

The etiology [4] involved in PNES could be one or more of the following,

1. Acute or situational stress
2. Anxiety and panic disorder
3. Depression and/or dissatisfaction
4. Poor interpersonal skills
5. PTSD (Post Traumatic Stress Disorder)
6. Reinforced behavioral pattern

Various observations [5] may help in arriving the **diagnosis** of PNES which are,

Body movements like migration, origin, pattern.

Verbal and pain responsiveness.

Duration of each seizure episode.

Deliberate self-harm and injuries including self-cut and tongue biting.

Bowel and bladder incontinence.

Inpatient video-electroencephalography is the preferred test for the diagnosis of psychogenic non epileptic seizures [3,6,7]. Definitive diagnosis is achieved when a patient is observed having typical seizures without accompanying electroencephalographic abnormalities [3,8]. Postictal prolactin levels greater than two times the upper limit of normal once were thought to differentiate generalized and complex partial seizures from psychogenic non epileptic seizures but recently have been shown to be unreliable [3]. Although not all seizures with normal EEG are psychogenic & not all seizures with abnormal EEG are epileptic, it is mandatory to take an EEG for all seizure patients as because non epileptic seizures can present along with epilepsy in same patient.

On comparing the signs of epilepsy with non-epileptic seizures, epilepsy presents with **in phase clonic movements without pelvic thrusting** compared to **out of phase movements with or without pelvic thrusting** in non-epileptic seizures [10].

Hystero-Epilepsy

Hystero-epilepsy is defined as the nervous disease of the women of great rarity, affecting them usually during the child bearing period of life and usually associated in hyperesthesia of one or both ovarian regions [2]. Almost all cases of hystero-epilepsy are associated with fright or anguish.

'Arc-De-Cercle

It is a significant finding in hystero- epilepsy where there is bowing of the body with back face downwards during the episode of seizure[9]. The **treatment** of PNES includes either the individual or combination of two or more of the following strategy for good prognosis [10],

1. Psychotherapy
2. Cognitive behavioral therapy
3. Medication
4. Biofeedback
5. EDMR (Eye Movement Desensitization and Reprocessing) therapy
6. Relaxation therapy [11].

III. Conclusion

This particular case had a medically refractory seizure with somatoform symptoms and history suggestive of emotional disturbance with normal EEG and CT brain and so diagnosed as a case of Psychogenic Non Epileptic Seizures for which she was prescribed with Antidepressants of class SSRI (selective serotonin reuptake inhibitor) namely ESCITALOPRAM 10 mg (HS) and also Benzodiazepine namely CLOBAZAM 10 mg (HS) under observation for 1 week followed which she recovered and prognosis was excellent.

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*Dr. K. Muralidharan M.D. " Intractable Psychogenic Nonepileptic Seizures. " *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)* 16.8 (2017): 29-32