Lecture Notes

NON-EPILEPTIC Seizures 2020‏

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Non-epileptic attack disorder common and crosses the boundaries between neurology and psychiatry. IN this lecture I will try and present some cases from real practice and around these cases I will try and address the psychiatrist perspective of non-epileptic attack disorder as well the neuropsychiatry perspective.

**Slide 2**: I think it is essential to remind ourselves about the definition of epilepsy . Seizure is a symptom which is occasional, of excessive and disorderly discharge of a nerve and as a result of that nerve discharge we have paroxysms of altered behaviour or motor function or sensory dysfunction. It starts and ends abruptly. Epilepsy is simply recurrence of epileptic seizures.

**Slide 3**: this is a case of a young lady in her 20s. She has a long history of epilepsy, but it was noticed that a response to anti epileptic drugs is sub- optimal. You can see in the third slide that she suffers from a relatively benign condition called juvenile myo- clonic epilepsy. However, she continued to function normally despite poor control of her epilepsy till she presented one day with acute onset of severe pain both extremities. That pain can only be relieved by immersion of the hands and feet in cold icy water. This presentation continued in a Medical ward.

The presentation was rather unusual. All investigations were normal. The psychiatrist who attended to her was asked what precisely she is doing. The answer to that question was she was baptising herself.

The case above illustrates the complexity of the diagnosis of epilepsy as well as the emergence of non-epileptic attack disorder. Also, it shows the relationship between epilepsy and non-epileptic attacks. There is also the issue of the relationship between sexual abuse & non-epileptic attacks.

**Slide 5**: This slide summarises the problems in in diagnosis of epilepsy, the problems with investigations, and issues related to treatment. Epilepsy is the number one in neurological disorder that can be treated effectively with medication, and it should be treated because simply an epileptic fit may kill.

# paroxysmal events

In the next 6 slides I shall be talking about the diagnosis and differential diagnosis of Paroxysmal events, either medical or neurological that are relevant to the diagnosis of Epilepsy and NEAD.

**Slide 6**: Paroxysmal events could be epileptic or non-epileptic. The non-epileptic paroxysmal events could be physiological or psychological . This is usually the path that we take in diagnosis and management off paroxysmal events presenting in the clinical practice.

**Slide 7**: Basically, nowadays Functional seizures that are non-epileptic are grouped under the heading of FND: Functional seizures, and are further sub classified as physiological and psychological.

The diagnosis of epilepsy is essentially clinical, and this is the main problem in management. Over reliance on investigation, or more precisely over enthusiastic interpretation of investigations might explain why 20% of patients attending highly specialised Epilepsy clinic suffers from NEAD. Always remember You do not diagnose epilepsy by a scan or EEG.

**Slide 8**: Physiological NES might appear very straightforward to diagnose but are very challenging. Syncope for example is easy to diagnose if it occurs one or twice, but repeated syncope might be associated with few motor movements that mislead some clinicians to diagnose epilepsy. Neurological events and startle induced phenomena are challenging, but probably some endocrine and metabolic events are often overlooked and one of them MEA syndrome. Drugs and alcohol might precipitate and epileptic attack.

**Slide 9**: Syncope is very common, and the important points to remember so that we do not miss the diagnosis have listed her. Dyskinesia can be paroxysmal in nature and the same thing applies to myoclonus.

**Slide 10**: Nocturnal epilepsy is problematic. There are people who only have nocturnal fits, and their EEG is often unremarkable. You may not rely on tongue biting or nocturnal bed wetting alone, and always needs a good witness and proper history. However, as it is the case with diurnal fits, there are benign sleep phenomena that are misdiagnosed as epileptic and on top of the list are disorders of arousal. Not uncommon these disorders are diagnosed as epileptic or alternatively an AED is prescribed.

**Slide 11**: Not all nocturnal are straightforward and some are rare but challenging. If in doubt investigate or refer to sleep clinic.

**Slide 12**: REM behaviour disorders may occur, and not uncommonly in patients suffering from Emotional problems. Dream behaviour itself may mimic epilepsy. I hope that there would be a chance to cover parasomnias in more details in the future.

# Psychogenic Seizures

**Slide 13**: Let’s move now to discuss Psychogenic NES.

**Slide 14**: To study PNS it is essential to be area of 4 clinical descriptions often encountered in Clinical practice. Generalised convulsions often mimic GTC, non convulsive often mimic Absence or a tonic seizure. There is a group that mimic partial seizures, and there is the subjective group who describe sensory or motor changes without LOC.

**Slide 15**: To diagnose PNS we follow the golden rules of clinical practise, and always keep in mind rare things are rare, and common things are common. What sounds like a duck quacking then it is most likely a sound produced by a duck? The EEG needs to be done, and if of you do not send the patient for an EEG he would certainly be dissatisfied. Video telemetry is not a simple procedure, and do not always expect the patient to have a fit during monitoring. Prolactin studies done within 30 minutes are useful especially if the the fit you are witnessing is GTC. Also do not be surprised if the patient resists any attempt to check their prolactin.

**Slide 16**: The history is probably more important than Clinical examination. If you feel competent to do a thorough Neurological Examination then do it, and make sure that you have a nurse with you. The seizure frequency is remarkable high and remember in real life more than 4 fits per month is always a sign of treatment resistant epilepsy, but with PNS we are talking about 40 plus. Their response to AED is inconsistent to say the least, and the seizure description is far from what usually you obtain in real practise. Profound Emotional Factors are obvious, and often there is AIB.

**Slide 17**: This case illustrates all the above 5 factors. A 16-year-old girl who was first diagnosed with Epilepsy. Her father left home when she was 8, and she lives with her mother, stepfather, and stepbrother. Her response to AED was inconsistent, and clinical examination unremarkable. The fit description was often commented upon that tongue biting is absent. So, what do you see in the slide?

**Slide 18**: Keep these 9 observations in mind when witnessing an attack. You can be certain that what your seeing is PNS.

**Slide 19**: Let me now turn to the falling seizures which in my opinion are the most challenging of all PNS. It is also my own personal view that re more likely than other seizures to be associated with with childhood sexual abuse or traumatic sexual experience.

**Slide 20**: Despite all the efforts of several specialists 64% of them in clinical practice remains of unknown origin. Also, almost all of them end up using at least one AED.

# Dissociation

**Slide 21**: To the psychiatrist nowadays PNS are the result of a dissociative process. Always remember that dissociation is not repression and boundaries between awareness and Nonawareness is perpendicular rather than horizontal.

**Slide 22**: Also, we often formulate the psychodynamics of Dissociation as a traumatised self is inconsistent with everyday self that appears to be in full control. However, the big question arising is what is a traumatised self?

**Slide 23**: Let me now talk a little bit about the most important model used to understand PNS and this is the psychodynamic model. Psychodynamic model of mental illness went into a decline, but what survived is the Defence Mechanisms. We all use them when we talk to each other, and often are part of psychiatry and psychology language. They are the only part of psychodynamic psychiatry that can be studied in research.

**Slide 24:** I use DMI in clinical practice and research. All defences are grouped into five major categories as follow.

**Slide 25**: The most dominant Defence style is reversal. This explains why they are often unwilling to engage in Therapy and their resistance to change.

**Slide 26**: Rarely they admit to depressive cognitions simply because of their reversal, and there is no point in prescribing AD unless they are clinically depressed. At the same they are often pleasant, always keep their appointment even if that meant travelling 100 miles as I had the experience with them.

**Slide 27**: They do not volunteer to see a psychiatrist, and they virtually hate psychotherapy.

**Slide 28**: Let’s now look at other defensive styles seen in clinical practice with PNS. High TAO PRO group are more hostile than others, and most resistant to the suggestion that they are not suffering from epilepsy. Their defence style explains their desire to be in control of their environment.

**Slide 29**: the TAS group are rarely seen or presentation, but they are chronically unhappy, and require input from psychiatric services.

**Slide 30**: This is a veery contentious subjects. There is exaggeration on behalf of many researchers on Dissociation and PNS to stress the importance of childhood sexual abuse.

**Slide 31**: There are also several other issues related to that subject that needs to be addressed in the future such as pTSD, false memory syndrome and domestic violence.

**Slide 32**: So, what code of the ICD 10 does a psychiatrist use in patients with PNS? ICD 11 is yet to be finalised.

# FND

**Slide 33**: Regrettably PNS are more of Neurological or Neuropsychiatric disorder rather than psychiatric and has been hijacked into to the new filed of FND.

**Slide 34**: FND is relatively a new field and broadly speaking deals with Functional Disorders.

**Slide 35**: This slide summaries the aetiology of FND.

**Slide 36**: In more details.

**Slide 37**: Let me now turn to another interesting area linking psychiatric presentation with Epilepsy that can be confused as PNS. This a case of recurrent hypomania lasting not more than 5 days.

**Slide 38**: Frontal Lobe seizures are rare but challenging.

**Slide 39**: Frontal Lobe seizures are essentially CPS according to the International classification of epileptic seizures 1981.

**Slide 40**: more description of Frontal Lobe seizures.

# Management

**Slide 41**: finally, what do we do with them. If there is a mental disorder, then it should be treated. There are several psychological interventions, but evidence-based management is hard to define.

**Slide 42**: What happens to them? Probably what happens to them in real life and resolution of psychosocial adversity as well as maturity would determine outcome.