Non-Epileptic Seizures: A Case Report

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On February 11th, 2017, a 44-year-old woman was rushed to the emergency room, experiencing an attack of primarily left-sided paralysis and an inability to speak. This attack was described as an unusual moment of altered consciousness with no immediate resolution. Our project follows the path of this individual’s differential diagnoses, leading to the final diagnosis of psychogenic non-epileptic seizures (PNES).

Introduction:

• PNES are categorized as a paroxysmal conversion disorder, identified by the onset of seizure-like episodes, correlated with the absence of abnormal cortical discharge.

• PNES as a condition is not currently well understood and is often misdiagnosed for similar conditions such as epilepsy, which can lead to delays in patient treatment.

GOAL: to provide a more detailed and complete understanding of this unusual case.

Methods:

Extensive Literature Review

Completed CITI training

Wrote and finalized IRB consent forms

Consulted with Dr. Adam Kalawi (Medical Resident in Child Neurology)

Completed and Submitted IRB

Received IRB approval

Requested and received letter of consent regarding medical records

Sent letters of consent to obtain medical records

DRAFTED CASE REPORT

Timeline of symptoms and diagnoses.

2/12/2017: 1st documented episode - exhaustion, numbness in left side of body, aphasia non-hemorrhagic cerebral vascular accident, hemorrhagic cerebral vascular accident, transient ischemic attack, paresthesia

2/23/2017: drowsiness and persistent pain in neck radiating into the arm, complex migraine, no epileptiform

3/2/2017: presented with migraine and aura and having seizure for the past 3 weeks

3/13/2017: vertigo, pain in neck and back, cervicalgia, benign positional paroxysmal vertigo (BPPV) left ear, lower back pain, nystagmus in left, Functional Neurological Symptom Disorder

3/17/2017: dizziness and giddiness, benign paroxysmal vertigo, conversion disorder with seizures or convulsions, cervicalgia, pain in thoracic spine, low back pain, difficulty walking

5/26-6/5/17: fatigue

2/22/2017: 2nd episode not non-hemorrhagic cerebral vascular accident, not hemorrhagic cerebral vascular accident, not intracranial hemorrhage, not Bell’s Palsy

3/1/2017: intractable hemiplegic migraine w/o status migrainosus - primary, insomnia (unspecified type)

3/8/2017: paralysis and altered mental status/unresponsiveness paralysis migraines, functional spells or non-epileptic spells

3/14/2017: paresthesia, significant neck, thoracic, lumbar spine pain, nystagmus in left, right posterior canalithiasis BPPV

4/6/17: Evaluation of PNES, pressure in head, numbness in face

6/20/2017: PNES last official diagnosis

Results:

Final diagnosis: PNES

Conclusion:

• Causes: Presence of an underlying psychological condition/trauma

• Treatment: Not standardized due to case-by-case manifestations of symptoms, although presence of an underlying condition aids direction of treatment.

• Statistics: Estimated 2-33 per 100,000 persons in the general population, more common but often not identified accurately.

• Diagnostic Techniques: Examination of epileptic seizures (ES) with an EEG confirmation with identification and diagnosis of a psychological condition/trauma.

• Current Literature Highlights: The origins of PNES are not well understood since PNES does not display a set of universally defined symptoms.

• As such, misdiagnosis is a key issue causing many cases to be mistaken for ES for years before correct diagnosis.

• Future Research Direction: Many studies indicate a larger sample size of officially diagnosed PNES patients will yield more reliable data. Improvements in diagnostic communication is expected to improve individual acceptance of the condition and may play a role in resolving further seizure episodes.

FINAL THOUGHTS:

Following analysis of the individual’s medical documents, an extensive list of possible conditions was ruled out with a series of unremarkable physical examinations and lab results. Many of those possible conditions present in a similar manner to PNES, but do not align with the lack of abnormal test results. Therefore, in comparison with published PNES literature, we concluded that the detailed journey of medical examination agrees with this final diagnosis and with current knowledge about this condition.

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References:


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