Psychogenic Non-Epileptic Seizures

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Different names

- Conversion Disorder
- Pseudoseizures
- Psychogenic Non-epileptic seizures
- Functional Neurological Complex Disorder
- Non-Epileptic Events

Diagnostic and Statistical Manual V

- One or more symptoms of altered voluntary motor or sensory function.
- Clinical findings provide evidence of incompatibility between the symptom and recognized neurological or medical conditions.
- The symptom or deficit is not better explained by another medical or mental disorder.
- The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation.

Associated symptoms

- **With weakness or paralysis**
- **With abnormal movement** (e.g., tremor, dystonic movement, myoclonus, gait disorder)
- **With swallowing symptoms**
- **With speech symptom** (e.g., dysphonia, slurred speech)
- **With attacks or seizures**
- **With anesthesia or sensory loss**
- **With special sensory symptom** (e.g., visual, olfactory, or hearing disturbance)
- **With mixed symptoms**

How frequent is PNES

- 5-20% of the 2 plus million people treated for epilepsy have PNES
- 20-50% admissions to the PEMU (Pediatric Epilepsy Medical Unit) are for PNES
- 40% in general neurology clinics
- 20% of patients with status epilepticus have PNES
- Happens to all ages, all stages, both genders

Symptoms are very similar to seizures

- Generalized trembling, jerking, uncoordinated movements
- Staring
- Generalized tremors
- Lightheaded, dizzy, faint, weak
- Falling episodes
- Complex violent behavior
- Unilateral jerking
- Among others

Diagnosing PNES

- EEG during PNES- normal; no changes during the episode, no changes compared from baseline either.
- EEG after the PNES- normal; no changes after the episode.

Why do patients develop PNES

- Family conflict
- History of trauma and adversity
- Patients with other chronic medical issues, including epilepsy
- Cognitive disabilities
- Mood disorders and anxiety disorders

migraines

depression

Risk Factors

- More comorbid medical, neurological (including epilepsy), and psychiatric problems
- Used more medications and intensive medical services; had higher anxiety sensitivity,
- Poor coping skills
- Experienced more lifetime adversities, including bullying.
- Cognitive issues
- Parents with a history of high somatization

Plioplys et al 2014

Youth with PNES

- Have more history of chronic illness (exposure to multiple medical appointments, and medical treatments, stays in the hospital)
- Tend to be fearful of their physical sensations and to over-interpret their physical symptoms
- Solitary emotional venting (such as yelling, crying or hitting pillow by oneself).
- Increased use of this passive and solitary coping behavior among the youth with PNES may reflect that they have not mastered more problem-focused coping skills and emotional regulation.
- Youth with PNES have poor adjustment to stress.

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CHILDREN WITH PNES ARE NOT FAKING

They can't consciously control the episode

What is somatization

- Somatization is the process whereby physical symptoms are experienced in response to stress and can be accounted for by genetic, environmental, and intergenerational family communication patterns.

family is key in identifying triggers

Common Adverse childhood experiences reported in PNES

- Family discord
- School problems
- Bullying,
- Interpersonal problems,
- Not physical or sexual abuse

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Youth with PNES

Are more frequently absent from school and take more medications

Have increased psychopathology including conversion disorder, more learning disorders, anxiety, depression, and PTSD compared to the siblings.

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What PNES is

- Is a real disorder
- With real symptoms
- With real triggers
- That can cause a lot of increased anxiety in the family and the school

Treatment

- There are some treatment studies on PNES
- Some of them involve medication (antidepressants- SSRI's)
- Some of them involve psychotherapy (cognitive behavioral therapy)
- Treatment helps decrease the number of Non-epileptic events and anxiety

Multicenter pilot treatment trial for psychogenic nonepileptic seizures: a randomized clinical trial

- **Pilot RCT with mental health clinicians trained to administer psychotherapy and or psychopharmacology to patients with PNES**
- **The group that participated in therapy showed a 51% reduction in seizures and improvement in depression, anxiety, quality of life and global functioning**

- LaFrance et al Jama Psychiatry 2014

General Cognitive Behavior Therapy

- Learn skills such as
  - Relaxation. Deep muscle relaxation involves a process of tensing and relaxing each muscle group.
  - Deep breathing techniques can reduce stress.
  - Wellness, including getting good sleep, eating healthy, exercise

Cognitive Behavior Therapy for PNES

- In addition to usual CBT
  - Identify triggers, such as stressors, and learn to observe them. Charting can be helpful.
  - What happens just before the child has a non epileptic event? Is it the same each time?
  - Use observations about physical symptoms as a guide to the emotional symptoms

Family Therapy to support CBT

- Parents can learn anxiety-reduction techniques, including
  - Defocus from child's symptoms to helping problem-solve external stressors
  - Connect with a parent support group
  - Focus on small gains that your child makes

School Input

- Identify triggers
- Protect from social stigma
- Continue care that is appropriate
  - Different from usual school protocol
  - Difficult to balance privacy with need to do something different from what school usually does for youth with seizures

Avoid Invasive Treatment

- If child is taken to Emergency Department from school, protocol may include invasive treatment
- Children with PNES only do not need antiepileptic medication to treat their non epileptic events

School Action Plan

- The School Action Plan for PNES should specify the alternative treatment to be given
- Medical team should be in close communication with the school
- Alternative plan needed
  - Do not call 911
  - Do not administer valium is not indicated

Developing a 504 Plan

- Reason for referral : student has PNES
- Relevant background information : diagnosed this date
- Specify the mental or physical impairment: PNES
- Specify the major life activity that is negatively affected: thinking, learning, concentrating (others according to symptoms)

Conclusion

- School can support PNES care
  - Identify triggers
  - Communicate with medical team
  - Protect child from social stigma

Thank You