PSYCHOGENIC NON-EPILEPTIC SEIZURES (PNES)

Adult and youth PNES differ in their risk factors, psychiatric/psychological assessment techniques, and treatment approaches.

Risk Factors in Adults
- History of traumatic or adverse life experiences (including significant health events)
- History of psychiatric disorders, including depression, anxiety, post-traumatic stress disorder and/or personality disorders
- History of medically unexplained symptoms

Risk Factors in Youth
- Epilepsy
- History of medically unexplained symptoms
- History of psychopathology, including anxiety, depression, post-traumatic stress disorder, ADHD.
- Family dysfunction and unrealistic parent expectations
- Psychological adverse events, mainly bullying
- Subtle to moderate undiagnosed learning difficulties
- Social difficulties

Diagnosing
- The gold standard for PNES diagnosis is obtaining video EEG (vEEG) monitoring and recording “typical” events that have no evidence of associated epileptiform discharges. These monitoring results are reviewed by a physician with expertise in epilepsy.
- Whenever feasible, it is recommended that all patients with clinical features consistent with PNES are evaluated by a mental health provider, such as a psychiatrist, psychologist, social worker or psychiatric nurse, as an inpatient during the diagnostic admission for vEEG or shortly thereafter as an outpatient.

Definition of PNES
Psychogenic non-epileptic seizures (PNES) are episodic changes in behavior that resemble epileptic seizures but are not associated with abnormal brain electrical discharges.

PNES are associated with underlying psychological stressors and are classified as a conversion disorder (Functional Neurological Symptom Disorder in DSM-5 classification). In conversion disorders psychological stressors and/or emotional conflicts are converted into or expressed as physical symptoms.
Management

- The diagnosis should be presented in a non-judgmental, positive manner, allowing for questions and providing time for explanations. Patients may be more amenable to the diagnosis if a somatoform explanatory model is offered, noting that effective treatment is available. Some patients may not initially be receptive to the diagnosis and may benefit from a follow-up appointment with neurologist.
- For pediatric cases, the neurologist/epileptologist and mental health professional should provide information on the diagnosis and comprehensive treatment approach separately to the parents and child.
- Patients and family members should be provided with educational materials about PNES prior to discharge (or as soon as diagnosis is established, if outpatient), so that they may continue to learn about the condition.
- A referral for psychiatric treatment with a mental health professional with experience in PNES and somatoform disorders is strongly recommended. If such expert is not available, referral to a general mental health professional is acceptable.
- Coordination of care between multidisciplinary providers (primary care, neurologist, mental health professionals, and school staff) will be needed in many cases with the mental health professional responsible for the coordination of care and communication.
- Driving issues should be addressed as consistent with state laws for epileptic seizures.
- Antiepileptic drugs (AEDs) do not treat PNES and may worsen it. Therefore, if the individual has lone PNES without comorbid epilepsy, and there is no other indication for AEDs, the prescribing clinician should discontinue AEDs.

Treatment Approach

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<tr>
<th>Adult</th>
<th>Youth</th>
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<td>Teaching the patient to use a seizure calendar may help to begin to identify patterns and associations of PNES episodes.</td>
<td>Treatment goals are:</td>
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<td>o Short-term - PNES symptom resolution achieved using a behavioral management plan implemented by the parents and explained to the child.</td>
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<td>o Reduction or elimination of psychogenic seizures</td>
<td>o Long-term - help the child use adaptive problem solving strategies that are developed through comprehensive psychotherapy with the child and parallel work with the parents.</td>
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<td>o Improvement of psychiatric comorbidities</td>
<td>• Facilitate transition to school and normal activities as soon as possible, which involves coordinated efforts by the treating physicians, therapist, parents, and school staff.</td>
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<td>o Improvement of quality of life and regaining independence and resuming activities of daily living (i.e. resuming social activities, returning to work, school, etc.)</td>
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