

# EPILEPSY FACT SHEET

## Psychogenic Non-Epileptic Seizures

### What are Psychogenic Non-Epileptic Seizures?

#### Causes of Epilepsy

Psychogenic Non-Epileptic Seizures (PNES) are changes in behaviour, perceptions, thoughts or feelings for a limited period of time, which resemble epileptic seizures. Symptoms can include loss of consciousness, twitching, jerking, shuddering, staring, unusual emotional states such as fear or déjà vu, bicycling and pelvic movements, rapid recovery from seizure, whispering, baby talk and soft breathing.

The difference between PNES and epilepsy is that psychogenic seizures are not caused by electrical abnormalities in the brain, and PNES last longer than epileptic seizures. PNES usually last between 2 – 20 minutes. PNES occur more frequently in women than men, with 75% of people experiencing PNES being women. The condition usually occurs in young adulthood, but has also been shown to affect children, teens, and seniors. People with PNES are not a homogenous group: they vary widely in background, personality, other illnesses and response to treatment and outcomes. Research is still being done to better understand this condition.

#### What Causes PNES?

PNES is considered a psychiatric disorder. The seizures are thought to be a psychological defense mechanism induced by stress or severe emotional trauma. The brain is very sensitive to the effects of stress such as illness, injury, emotional distress, and trauma. This means that danger or severe stress can destabilize the neural system resulting in the stimulation of an unwanted brain and body response. PNES reveal the complex interplay between the neural, emotional and physiological experiences.

People with PNES regularly report experiencing multiple traumatic events that began in childhood and continue into adulthood. Anxiety, depression, PTSD and chronic pain disorders are common in people with PNES. The predominant risk factors for this condition are dissociation, emotional disorders, and psychic trauma such as exposure to death, threatening death, a sudden change, or sexual violence. Although PNES have been found to be connected to experiences of trauma, anxiety, and depression, it is possible for someone to experience PNES without having these risk factors.

#### How Are PNES Diagnosed?

The best method for diagnosing PNES is using a video EEG (vEEG) over several hours or days to record all seizures. This method helps to differentiate PNES and epilepsy, an essential step to providing the correct treatment. Other factors indicating PNES include resistance to two or more AEDs, seizures are consistently associated with a specific environmental or emotional trigger, the seizures usually occur in front of other people and not during sleep, and a history of chronic or past abuse or trauma, and a normal EEG. Early identification is a key aspect of a positive prognosis.

If PNES is suspected, a psychiatric diagnostic evaluation will help to gain better understanding of vulnerabilities to PNES, external triggers, barriers to treatment and resources available. This evaluation will explore developmental history, family/social information, education/occupational history, mental health, substance use/abuse, and abuse, trauma, and neglect.

## How Do I Manage PNES?

PNES should be managed through targeted interventions by a multidisciplinary team including a neurologist, psychiatrist, psychologist, and EEG technical staff. Psychological counselling is the most effective treatment in searching for the psychogenic origin of the seizures. Follow-up by a neurologist is recommended. Support with health insurance, transportation and finding available health care practitioners is also useful. This support can be in the form of a social worker or clinic support staff.

**AEDs are not effective in non-epileptic seizures.** Withdrawal from AEDs should be done progressively under the supervision of a health care professional. Continuing AEDs should be based on evidence of epileptic seizures.

The overall goal of PNES management is to reduce or eliminate the psychogenic seizures completely while treating psychiatric conditions that are affecting quality of life. Forty percent of people become seizure-free after a PNES diagnosis. Factors that increase the likelihood of effective treatment include: care starting as quickly as possible after symptom onset; the acceptance of the psychogenic source of the seizures; the absence of epilepsy; a supportive care environment; occupational activity; and the absence of a history of trauma.

Managing stress and regulating your stress responses can help alleviate PNES symptoms. Arousal decreasing interventions such as slow breathing exercises, soothing imagery, mindfulness, distraction and grounding exercises are ways to regulate stress responses.

### **The 4 phases of PNES treatment are:**

- Clear communication of diagnosis;
- Evaluation of predisposing, precipitating and perpetuating factors;
- Information and support to better understand PNES;
- Individually adapted therapy.

*This information sheet provides general information for the public; it is not medical advice.  
All questions about PNES should be discussed with your physician.*



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