

Seizures can be broadly categorized as epileptic or non-epileptic. An epileptic seizure (ES) is an organic condition that involves a sudden, uncontrolled change of electrical discharges in the brain that results in unusual behaviours such as muscle spasm, body shakes, twitching, falling, loss of focus, and staring blankly. A non-epileptic seizure (NES) is an episode of unusual behaviour that resembles seizure behaviours but is not caused by abnormal electrical discharges from the brain. NES may be caused by an abrupt drop in blood pressure or an imbalance of body fluids or chemicals, but the reason is often psychological. Psychogenic NES occurs in approximately one in five patients sent to seizure centres for difficult-to-manage seizures.

## Diagnosis

NES is a treatable psychological condition. Misdiagnosing NES leads to the unnecessary use of antiepileptic medication, which can worsen NES and affect learning or working ability. Since NES and ES patterns look identical even to the eyes of a family physician, it is important for experienced physicians to use appropriate tests to diagnose this condition. The most reliable diagnosis is EEG-video monitoring to rule out any organic reasons for seizure.

## Causes of NES

Stressors or trauma in a person's life usually cause NES – without that person's conscious awareness of their cumulative effect. The underlying dynamics of stress threaten the person's security, and NES helps to relieve anxiety by opening a channel of expression. Cumulative stressors could be any life changes that affect the person. Common stressors are loss of a relative/friend, pet, friendship, relationship difficulties, significant family conflicts, change of school/job, abuse, teasing, or learning difficulties.

NES are not faked, and the term 'pseudoseizure' should not be used to describe this condition. A person who fakes a seizure has a different psychological diagnosis that requires different management.

## Assessment and Treatment

The assessment process takes teamwork, time, and patience. During the diagnosis of NES, a neurologist rules out ES, while a psychologist rules in psychological stressors, which are detected by a thorough history-taking and psychological testing. There is a 10% to 40% chance that ES and NES will coexist. Under these circumstances, it is important to understand both conditions and treat them appropriately.

## How Can Doctors Help

Confronting NES without education exposes patients to heightened anxiety. Educating patients and their families about psychosomatic illness and the relationship between psychological stressors and bodily discomfort helps to reduce fears. Informing the patient of a correct diagnosis is half the battle. By helping their patients to understand that referral to a psychologist does not mean that their medical team will abandon them or that their symptoms are not being taken seriously, physicians can ease the transition and maximize compliance.

## References

1. Wylie E. et al. Psychogenic seizure and other non-epileptic paroxysmal events in children. *Epilepsy & Behavior* 2002; 3, 46-50.
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