

## **Psychogenic Non-Epileptic Seizures: Hints for the Front-Line Doctors**

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Dear Sir,

Psychogenic non-epileptic seizures (PNES) are common presentations to the emergency department and often lead to a diagnostic conundrum. Junior doctors often fail to distinguish presentations related to PNES. Consequently, patients are managed according to the seizure pathway which incorporates administration of antiepileptic drugs and intubation for refractory cases. This practice has short and long-term implications both for the patient and the health care system. In this short letter, we would like to highlight a few clinical clues, which when present, should point more towards PNES, allowing for early diagnosis and prompt initiation of appropriate interventions.

PNES are psychologically driven paroxysmal episodes that can mimic epilepsy. PNES are common with an estimated prevalence between 2 to 33 per 100,000<sup>1</sup>. It has a female preponderance with F:M ratio of 3:1<sup>2</sup>.

History and careful observation are key when assessing patients with neurological problems, and particularly important in patients presenting with a fit. A detailed psychosocial history may reveal an underlying post-traumatic stress disorder related to physical or sexual abuse. Psychiatric comorbidities including depression, anxiety and personality disorders are more common in patients with PNES. Reporting vague somatic complaints, lack of concern about seizures and abnormal interaction with family may all be indicative of PNES.

Epileptic seizures are usually short-lasting (less than 1 to 2 minutes), whereas PNES tend to last longer. Patients with PNES show a tendency to close their eyes during the event and may resist eyelid opening. Motor activity in PNES is variable and often has a fluctuating course with waxing and waning which contrasts with stereotyped epileptic seizures. Certain patterns may also suggest PNES including forward pelvic thrusting, rolling from side to side and wild thrashing although it is worth noting that rarely frontal lobe seizures may present with unusual motor movements. Furthermore, brief pauses in rhythmic movement occur more commonly in PNES.

The immediate postictal period may also provide useful hints that help distinguish between the two entities. Ictal or postictal crying is a specific indicator of PNES, although it lacks sensitivity.

Rapid recovery would also lean itself towards PNES, and suggestibility may trigger another episode. Interestingly, some patients with PNES can recall the period when they appeared unconscious and we strongly advise clinicians to ask patients about their memory of the events. Autonomic changes due to activation of the sympathetic system (e.g. tachycardia and pupillary dilatation) are suggestive of an epileptic fit. PNES patients may even bite the tip of their tongue, lip, or the insides of their cheeks in contrast to epileptic patients who usually bite the side of the tongue. It is important to note that urinary incontinence is not a helpful distinguisher and can occur in both.

In conclusion, making a correct and early diagnosis of PNES is crucial to avoid not only the unwanted drug toxicity and unnecessary intensive care unit admissions which are not without risks, but also the financial burden on the health care system. Additionally, it enables the initiation of appropriate psychological interventions to improve outcomes. Finally, always ask for help from your friendly neurologist when doubt exists.

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