Tidsskriftet Tidsskrift for Den norske legeforening

From hysteroepilepsy to non-epileptic seizure

LANGUAGE COLUMN

KARL O. NAKKEN

E-mail: karln@ous-hf.no
Karl O. Nakken, MD, PhD, neurologist and retired senior consultant. For many years, he served as chief medical officer at the National Centre for Epilepsy in Sandvika.

ANTONIA VILLAGRAN

Antonia Villagran, MD, senior consultant and specialist in neurology with a special interest in epileptology at the National Centre for Epilepsy in Sandvika.

Seizures that resemble epileptic seizures but are not related to epilepsy, should be called *non-epileptic seizures,* even though the expression is not completely precise.

'The Almighty Brain' by Andrzej Dudzinski (1990). Illustration: Science photo library / NTB

There are many kinds of seizures that greatly resemble epileptic seizures but that are not related to epilepsy. The most common are seizures where there are no EEG or organic brain correlations, and where there is a suspicion of underlying psychosocial causes.

What should we call such seizures? This question has been a topic of discussion for many years.

Many terms proposed

In the 1880s, the French neurologist Jean-Martin Charcot (1825–1893) introduced the term *hysteroepilepsy* to describe such seizures (1). He believed the seizures only occurred in women and were caused by their 'wandering

womb'. The term has long been abandoned. Sigmund Freud (1856–1939), who was influenced by Charcot, was the first to claim that such seizures could have psychological causes. He pointed to sexual repression in particular.

Even though many other terms have been used in modern times Box 1), it has proved difficult to reach agreement on the preferred term. Some of the terms are regarded as too broad, others too narrow, while patients perceive yet others as disrespectful or stigmatising. Danish paediatricians use widely differing terms and diagnostic codes ((2), and we know that Norwegian neurologists often use code *R 56.8: Other and unspecified convulsions*.

Box 1 Terms used for epilepsy-like seizures that are not related to epilepsy, and where psychological causes are suspected

Hysteroepilepsy

Hysterical seizure

Pseudoseizure

Non-epileptic seizurePsychogenic seizure

Psychogenic, non-epileptic seizure (PNES)

Paroxysmal, non-physiological events

Conversion seizure

Dissociative seizure

Functional seizure

Stress-related seizure

Why not *functional seizure*?

Today it is common to use a biopsychosocial model to explain such seizures (3, 4). This means that there may be many underlying mechanisms of both a biological and psychosocial nature that are often intricately interwoven. In our experience, this group of patients is often very diverse.

We believe that the term *pseudoseizure* must be rejected since it conveys associations to feigned or false seizures. Nor do we regard the term *stress-related seizure* as particularly accurate even though the use of this term can make the seizures less threatening for some patients.

In the ICD 10 classification system, this type of seizure is placed under dissociative disorders, but our experience suggests that seizures are not always an element of a dissociative disorder. In DSM 5, these seizures are listed under functional neurological disorders. We have a long tradition in neurology of talking about functional paralysis, and similarly we know that many use the term *functional seizure* (5, 6). However, 'functional disorder' is a poorly defined concept, and by no means self-explanatory. It is often used in patients with subjective and medically inexplicable health problems that are assumed to be caused by psychosocial factors (7). For many patients, the word 'functional'

may also be difficult to understand. This is problematic when doctor and patient are meant to achieve a joint understanding of the reason for the seizures.

What is wrong with the term *psychogenic seizures*?

The term that is now most widely used internationally is *psychogenic non-epileptic seizure*, abbreviated as PNES. The Norwegian equivalent of this term (*psykogene ikke-epileptiske anfall*) has been faithfully used in Norway, at least in writing (8–10). Nevertheless, we are not particularly keen on it and find the term too narrow. Some patients also react to the use of the word 'psychogenic'.

What term should we then use?

We think it is difficult to find a term to describe the seizures that is applicable, clinically correct and which patients do not perceive as offensive. When in contact with these patients, we mostly use the term *non-epileptic seizure*, even though we know that this term is not completely precise. Meanwhile, it is neutral and says nothing about what we consider to be the underlying causes – which we often cannot be sure about. Patients also accept this. Moreover, it is in line with the term *non-cardiac chest pain*, which has proved to be very useful (Egil W. Martinsen, personal statement). Nonetheless, if colleagues have other and better suggestions, we would be very interested to hear them.

LITERATURE

1. Hill D. Historical review. I: Reynolds EH, Trimble MR (red). Epilepsy and Psychiatry. London: Churchill Livingstone, 1981: 1–26.

2. Wichaidit BT, Østergaard JR, Rask CU. Diagnostic practice of psychogenic nonepileptic seizures (PNES) in the pediatric setting. Epilepsia 2015; 56: 58–65. [PubMed][CrossRef]

3. Reuber M, Brown RJ. Understanding psychogenic nonepileptic seizures-Phenomenology, semiology and the Integrative Cognitive Model. Seizure 2017; 44: 199–205. [PubMed][CrossRef]

4. Brown RJ, Reuber M. Psychological and psychiatric aspects of psychogenic non-epileptic seizures (PNES): A systematic review. Clin Psychol Rev 2016; 45: 157–82. [PubMed][CrossRef]

5. Asadi-Pooya AA, Brigo F, Mildon B et al. Terminology for psychogenic nonepileptic seizures: Making the case for "functional seizures". Epilepsy Behav 2020; 104: 106895. [PubMed][CrossRef]

6. Espay AJ, Aybek S, Carson A et al. Current concepts in diagnosis and treatment of functional neurological disorders. JAMA Neurol 2018; 75: 1132–

41. [PubMed][CrossRef]

7. Malt UF, Malt EA, Blomhoff S et al. Funksjonelle somatiske lidelser–en oversikt. Tidsskr Nor Lægeforen 2002; 122: 1379–84. [PubMed]

8. Lund C, Haraldsen I, Lossius MI et al. Psykogene ikke-epileptiske anfall. Tidsskr Nor Legeforen 2009; 129: 2348–51. [PubMed][CrossRef]

9. Tuft M, Karterud HN, Villagran A et al. Treatment for psychogenic non-epileptic seizures. Tidsskr Nor Legeforen 2015; 135: 1449–51. [PubMed] [CrossRef]

10. Lossius MI, Villagran A, Karterud HN et al. Psykogene ikke-epileptiske anfall hos barn. Tidsskr Nor Legeforen 2016; 136: 1993–5. [PubMed] [CrossRef]

Publisert: 8 March 2021. Tidsskr Nor Legeforen. DOI: 10.4045/tidsskr.20.0832