

## Focal seizure

### Abstract

Focal seizures (also called partial seizures and localized seizures) are seizures which affect initially just one hemisphere of the brain. The brain is split into two hemispheres, each consisting of 4 lobes – the frontal, temporal, parietal and occipital lobes. A seizure is generated in and affects only one a part of "> a part of the brain – an entire hemisphere or part of a lobe. Symptoms will vary consistent with where the seizure occurs. Within the lobe symptoms may include a wave-like sensation within the head; within the lobe, a sense of Dyslexia; in the lobe, numbness or tingling; and within the lobe, visual disturbance or hallucination.

### Introduction

In focal onset aware seizures, a little a part of one among the lobes could also be affected and therefore the person remains conscious. this will often be a precursor to a bigger focal onset impaired awareness seizure. When this is often the case, the focal aware seizure is typically called an aura.

A focal impaired awareness seizure affects a bigger a part of the hemisphere and therefore the person may lose consciousness. If a seizure spreads from one hemisphere to the opposite side of the brain, this may produce to a focal to bilateral seizure. The person will become unconscious and should experience a tonic clonic seizure. When people have multiple focal seizures they typically have a condition referred to as lobe epilepsy. (A grand mal is one that involves each side of the brain from the onset).

### Simple partial seizures

Simple partial seizures are seizures which affect only a little region of the brain, often the temporal lobes or structures found there, like the hippocampi. People that have focal aware seizures remain conscious. Focal aware seizures often precede larger focal impaired awareness seizures, where the abnormal electrical activity spreads to a bigger area of the brain. This will end in a tonic-clonic seizure.

Simple partial seizures are a really subjective experience, and therefore the symptoms vary greatly between people. The symptoms of those seizures also can be misconstrued as auras, especially for epilepsy patients with multiple sorts of seizure diagnosis. This is often thanks to the varying locations of the brain during which the seizures originate (e.g., Rolandic). An easy partial seizure may go unnoticed by others or shrugged off by the sufferer as merely a "funny turn." Focal aware seizures usually start suddenly and are

Very brief, typically lasting 60 to 120 seconds. Some common symptoms of an easy partial seizure, when the person is awake, are.

- preserved consciousness
- Sudden and inexplicable feelings of fear, anger, sadness, happiness or nausea
- Sensations of falling or movement
- experiencing of bizarre feelings or sensations
- altered sense of hearing, smelling, tasting, seeing, and tactile perception (sensory illusions or hallucinations), or feeling as if the environment isn't real (derealization) or dissociation from the environment or self (depersonalization) • a sense of spatial distortion—things accessible may appear to be at a distance

When a seizure occurs during sleep, the person will often become semi-conscious and act out a dream they were having while engaging with the important environment as normal. Objects and other people usually appear normal or only slightly distorted to them, and can be ready to communicate with them on an otherwise normal level. However, since the person remains acting during a dream-like state, they're going to assimilate any hallucinations or delusions into their communication, often chatting with a hallucinatory person or speaking of events or thoughts concerning their dream or a hallucination.

While-asleep symptoms include:

- Onset usually in paradoxical sleep
- Dream-like state
- Appearance of full consciousness
- Hallucinations or delusions
- Behavior or visions typical in dreams
- ability to interact with the environment and people as fully consciousness, though often behaving abnormally, erratically, or failing to be coherent
- complete amnesia or assimilating the memory as if it had been a traditional dream on regaining full consciousness
- Dreams of lifestyle that appears as if they happened actually, and may cause disorientation upon awakening

Although hallucinations may occur during focal aware seizures they're differentiated from psychotic symptoms by the very fact that the person is typically aware that the hallucinations aren't real.

### References

- "Partial (Focal) Seizures". Johns Hopkins Medicine. The Johns Hopkins University. Retrieved 1 September 2016.
- Bradley, Walter G. (2012). "67". *Bradley's neurology in clinical practice* (6th ed.). Philadelphia, PA: Elsevier/Saunders.