

**05/18/10**

## **The overt characteristics of a “psychogenic non-epileptic event.”**

The terminology is confusing. “Psychogenic seizures” are real ictal events that are precipitated by an intense emotional experience. “Hysterical pseudo-seizures” are non-epileptic events that occur in conversion disorder. What we saw last week was a “malingered seizure.”

From Psychiatric Issues In Epilepsy, Ettinger and Kanner, 2007, chapter 25, “Overview Of Psychological Non-Epileptic Seizures.” Characteristics of non-epileptic seizures:

1. Geotropic eye movements, in which the eyes deviate downward to the side toward which the head is turned.
2. Eyelids are typically closed at the onset of a non-epileptic seizure, and for longer duration, compared to temporal lobe or frontal lobe seizures
3. Weeping is associated with NES
4. All the thrusting may occur in frontal lobe seizures, but not nearly so dramatic or prolonged as when they occur with non-epileptic seizures.
5. Out of phase or side to side oscillatory movements or chaotic and disorganized thrashing.
6. Whole body trembling, waxing, waning and changing in nature over many minutes.

More than half of all patients having a non-epileptic seizure actually sustain some kind of physical injury, and tongue biting, self injury or incontinence may also occur.

Lack of elevation of prolactin it is 89% sensitive for identifying non-epileptic seizures. Theoretically, the prolactin level, drawn within 10 or 20 minutes after the onset of the event, should increase by a factor of two against a baseline in a total prolactin in association with a real epileptic seizure. Of course, one doesn't ordinarily have a baseline prolactin.

[Neurology](#). 2005 Sep 13;65(5):668-75.

Use of serum prolactin in diagnosing epileptic seizures: report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology.

[Chen DK](#), [So YT](#), [Fisher RS](#); [Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology](#).

### **Abstract**

**OBJECTIVE:** The purpose of this article is to review the use of serum prolactin assay in epileptic seizure diagnosis. **METHODS:** The authors identified relevant studies in multiple databases and reference lists. Studies that met inclusion criteria were summarized and rated for quality of evidence, and the results were analyzed and pooled where appropriate. **RESULTS:** Most studies used a serum prolactin of at least twice baseline value as abnormal. For the differentiation of epileptic seizures from psychogenic nonepileptic seizures, one Class I and seven Class II studies showed that elevated serum prolactin was highly predictive of either generalized tonic-clonic or complex partial seizures. Pooled sensitivity was higher for generalized tonic-clonic seizures (60.0%) than for complex partial seizures (46.1%), while the pooled specificity was similar for both (approximately 96%). Data were insufficient to establish validity for simple partial seizures. Two Class II studies were consistent in showing prolactin elevation after tilt-test-induced syncope. Inconclusive data exist regarding the value of serum prolactin following status epilepticus, repetitive seizures, and neonatal seizures. **RECOMMENDATIONS:** Elevated serum prolactin assay, when measured in the appropriate clinical setting at 10 to 20 minutes after a suspected event, is a useful adjunct for the differentiation of generalized tonic-clonic or complex partial seizure from

psychogenic nonepileptic seizure among adults and older children (Level B). Serum prolactin assay does not distinguish epileptic seizures from syncope (Level B). The use of serum PRL assay has not been established in the evaluation of status epilepticus, repetitive seizures, and neonatal seizures (Level U).