Classification of "Neurological Spells": Focusing on Epileptic Seizures

Neurological Spell

Seizure

Non-epileptic, organic/provoked seizures

- → Metabolic (hypoglycemia, hyponatremia, etc)
 → Stroke-induced
- →Drugs →Withdrawal (alcohol, benzo's,
- barbituates) →Febrile seizure (Etc)

Epileptic Seizure

(unprovoked/spontaneous, hypersynchronous discharge of brain neurons; recurrent in predisposed patients).

Partial (i.e. Focal)

(seizure originates within networks in ONE hemisphere, effects localized to on portion or side of the body)

Mixed (unclassified)

(Seizure arises within bilateral networks in both hemispheres, affects the entire body)

General

Other spell

- Syncope
 - TIA
- Migrane
- Movement disorder
- Psychiatric (i.e. conversion disorder, panic attack)

Simple partial/focal

(pt is aware of seizure, can control it)

- → Motor
- → Sensory (aura, déjà vu, inappropriate emotions, etc)
- → Autonomic (Sweating, palpitations in short durations i.e. 30s)

→ Psychic

Complex Partial (i.e. Focal Seizure with Dyscognitive features)

(Pt loses consciousness, unresponsive to health staff, etc)

Simple or Complex partial, with secondary generalization

(started off localized/focal, then progressed to bilateral brain hemispheres, with effects spreading across entire body)

Convulsive

→ Myoclonic: electric-shock-like muscle jerks

→ Clonic: involuntary rhythmic muscle contractions, like clonus

→ **Tonic**: slow, non-moving muscle contractions

→ Tonic-Clonic (grand mal seizures): sudden skeletal muscle rigidity for a few seconds, followed by convulsive contractions of skeletal muscle

Non-convulsive → Absence (petit mal seizures; typical +

atypical) →Atonic