Tonic-clonic seizure

A generalized tonic-clonic seizure, is a type of epileptic seizure characterized by a sudden, intense electrical discharge that affects the entire brain, leading to a loss of consciousness and uncontrolled muscle activity. This type of seizure is one of the most recognizable and dramatic seizure types. Here's an overview of what happens during a generalized tonic-clonic seizure:

Tonic Phase:

Tonic Muscle Stiffening: The seizure begins with the tonic phase. During this phase, the person loses consciousness, and their muscles suddenly become stiff and rigid. This muscle stiffness can lead to the person falling if they were standing when the seizure started. Respiratory Distress: The chest and diaphragm muscles can become rigid, making breathing difficult. As a result, the person may make grunting sounds or have difficulty breathing. Cyanosis: The person's skin may turn bluish due to a lack of oxygen, a condition known as cyanosis, caused by impaired oxygen exchange in the lungs. Clonic Phase:

Rhythmic Jerking Movements: After the tonic phase, the seizure transitions into the clonic phase. During this phase, the person experiences intense, rhythmic jerking movements of their limbs, including both arms and legs. These movements can be forceful and uncontrolled. Drooling or Frothing: The seizure may cause excessive saliva production, leading to drooling or frothing at the mouth. Bowel or Bladder Incontinence: Loss of control over bowel or bladder function can occur in some cases. Injury Risk: During the clonic phase, the person may be at risk of injury due to the uncontrolled movements. Postictal State:

Recovery and Confusion: After the clonic phase, the seizure subsides, and the person enters the postictal state. They may be confused, disoriented, tired, and not remember the seizure or events leading up to it. This phase can last for minutes to hours. Headache and Muscle Aches: Some individuals may experience a headache or muscle aches after a generalized tonic-clonic seizure. Generalized tonic-clonic seizures can be triggered by various factors, including epilepsy, head injuries, fever (in the case of febrile seizures, often seen in children), or underlying medical conditions. They can be alarming for both the person experiencing the seizure and those witnessing it. In some cases, generalized tonic-clonic seizures can be part of a person's epilepsy syndrome.

Managing generalized tonic-clonic seizures often involves antiepileptic medications, lifestyle modifications, and identifying and addressing potential seizure triggers. Individuals who experience these seizures should work closely with healthcare professionals to develop a personalized seizure management plan. If generalized tonic-clonic seizures are prolonged or recur in rapid succession, it's considered a medical emergency, known as status epilepticus, and requires immediate medical attention to prevent potential brain damage.

Involve an initial contraction of the muscles (tonic phase) which may involve tongue biting, urinary incontinence and the absence of breathing. This is followed by rhythmic muscle contractions (clonic phase). This type of seizure is usually what is referred to when the term 'epileptic fit' is used colloquially.

Valproic acid (VA): if no evidence of focality some studies show fewer side effects than phenytoin.

Focal-to-bilateral tonic-clonic seizure