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Bilateral tonic-clonic seizure

Bilateral tonic-clonic seizure is a type of seizure that involves the entire body. It is also called grand mal seizure. The terms generalized seizure, convulsion, or epilepsy are most often associated with bilateral tonic-clonic seizures.

Causes

Seizures result from electrical overactivity in the brain. Bilateral tonic-clonic seizures may occur in people of any age. They can occur once (single episode). Or, they can occur as part of a repeated, chronic illness (epilepsy). Some seizures are due to psychological problems (psychogenic or non-epileptic).

Symptoms

Many people with generalized bilateral tonic-clonic seizures have an aura with one or more symptoms before the seizure such as:

- Vision, taste, smell, or sensory changes.
- Seeing, smelling, or sometimes hearing things that are not there (hallucinations).
- Dizziness or other symptoms.

Some people have a focal onset seizure (only affecting one part of the body) that becomes a bilateral tonic-clonic seizure.

The seizures often result in rigid muscles (tonic phase). This is followed by violent muscle contractions (clonic phase). Other symptoms that occur during the seizure may include:

- Biting the cheek or tongue
- Clenched teeth or jaw
- Loss of urine or stool control (incontinence)
- Stopped breathing or difficulty breathing
- Blue skin color (cyanosis)

After the seizure, the person may have:

- Confusion
- Drowsiness or sleepiness that lasts for 1 hour or longer (called the post-ictal state)

- Loss of memory (amnesia) about the seizure episode
- Headache
- Weakness of one side of the body for a few minutes to a few hours following seizure (called Todd paralysis)

Exams and Tests

Your health care provider will perform a physical exam. This will include a detailed check of the brain and nervous system.

An electroencephalogram (EEG) will be done to check the electrical activity in the brain. People with seizures often have abnormal electrical activity seen on this test. In some cases, the test shows the area in the brain where the seizures start. The brain may appear normal after a seizure or between seizures.

Blood and urine tests may also be ordered to check for other health problems that may be causing the seizures.

Head CT or MRI scan may be done to find the cause and location of the problem in the brain.

Treatment

Treatment for tonic-clonic seizures includes medicines, changes in lifestyle for adults and children, such as activity and diet, and sometimes surgery. Your provider can tell you more about these options.

Alternative Names

Seizure - tonic-clonic; Seizure - grand mal; Grand mal seizure; Seizure - generalized; Epilepsy - generalized seizure

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