

Seizures: Medical Information Overview

What Are Seizures?

- Sudden, uncontrolled electrical disturbances in the brain
- Can cause changes in behavior, movements, feelings, and consciousness
- May last from a few seconds to several minutes
- Not all seizures involve convulsions or loss of consciousness

Types of Seizures

Focal (Partial) Seizures

- Occur in one area of the brain
- Simple focal: No loss of consciousness, may involve twitching or sensory changes
- Complex focal: Altered consciousness, confusion, repetitive movements

Generalized Seizures

- Involve the entire brain from the start
- Tonic-clonic (Grand mal): Stiffening followed by jerking movements, loss of consciousness
- Absence (Petit mal): Brief loss of awareness, staring spells, more common in children
- Myoclonic: Sudden muscle jerks
- Atonic: Sudden loss of muscle tone, "drop attacks"

Common Causes

- Epilepsy (most common cause of recurrent seizures)
- Head trauma or brain injury
- Stroke or brain tumors
- Infections (meningitis, encephalitis)

- High fever (especially in children)
- Low blood sugar, electrolyte imbalances
- Drug or alcohol withdrawal
- Sleep deprivation
- Certain medications

Warning Signs (Aura)

- Strange taste or smell
- Visual disturbances or hallucinations
- Déjà vu sensation
- Sudden fear or anxiety
- Nausea or stomach discomfort
- Not everyone experiences warning signs

What to Do During a Seizure

- Stay calm and time the seizure
- Keep the person safe - move dangerous objects away
- Turn them on their side if possible to prevent choking
- Place something soft under their head
- DO NOT put anything in their mouth
- DO NOT try to restrain them
- Call 911 if seizure lasts longer than 5 minutes or if injury occurs

When to Seek Emergency Care

- First-time seizure
- Seizure lasts longer than 5 minutes
- Repeated seizures without recovery between them

- Difficulty breathing or injury during seizure
- Seizure in water
- Person has diabetes, is pregnant, or has other medical conditions

Treatment Options

- Anti-seizure medications (most common treatment)
- Ketogenic diet (especially for children)
- Vagus nerve stimulation (VNS)
- Surgery (for severe, medication-resistant cases)
- Lifestyle modifications (regular sleep, stress management)

Living with Seizures

- Many people with epilepsy live normal, active lives
- Important to take medications as prescribed
- Identify and avoid personal seizure triggers
- Wear medical alert identification
- Discuss driving restrictions with healthcare provider
- Regular follow-up with neurologist recommended

Important Notes

- Seizures are a symptom, not a disease
- Having one seizure doesn't necessarily mean you have epilepsy
- Proper diagnosis requires medical evaluation and often EEG testing
- Treatment plans should be individualized based on seizure type and frequency

This information is for educational purposes only and should not replace professional medical advice. Always consult with a healthcare provider for proper diagnosis and treatment.