Seizures in People with Developmental Disabilities

Rehabilitative Resources, Inc. Sturbridge, MA



Seizures

- Epilepsy (also known as seizure disorder) is a neurological condition.
- Damage of the brain cells disrupts the smooth-running pattern of electrical activity in the brain causing overload.
- The electrical overload can create seizure activity.

Seizure Types

Generalized or Grand Mal Seizures

Partial Seizures Complex partial seizures Simple partial seizures

Generalized or Grand Mal Seizure

- Entire brain is affected.
- Consciousness always impaired or lost
- Convulsions may occur.
 - Also called tonic-clonic seizures.

Grand Mal Seizures

Common effects:

- Person may stop breathing, turn pale or blue.
- Biting of tongue, eyes may role back into head.
- Loss of bladder or bowel control.
- No control of movement, speech or action.
- Following seizure sleep or temporary confusion may occur.

Partial Seizures

- Complex partial
 Affect a large area of the brain and affect consciousness.
- Simple partial
- Decrease consciousness but there is no loss of consciousness.

Complex Partial Seizure

Common effects:

- Dazed state
- Drooling and purposeless behavior (i.e. lip smacking or jerking movements)
- Wandering
- May run in fear or cry out.
- No control of movement, speech or actions.

Simple Partial

- Decrease in the level of consciousness, but no loss of consciousness
- Common effects:
 - Eye movements or shifting of facial features.
 - Shaking of hand or foot
 - Sudden nausea
 - Sweating, flushing or becoming pale
 - Person may become very emotional

Generalized or grand mal
 Easy to recognize
 Loss of consciousness
 Convulsions

Complex or Simple Partial

- Can be difficult to recognize in a non-verbal person
- Many "seizure like" movements could be the person's baseline, for example:
 - Stiffening, jerking, tongue biting, tremors, and/or facial shifting

- If the person is unable to respond they are most likely having a seizure
- Have a simple task or response plan.

- "Aura" is a partial seizure that is experienced as a peculiar sensation that precedes the onset of a generalized seizure
- Can involve any one of the five senses
- Can take the form of taste, visual, or auditory experience.
 - People who experience an "Aura" may sit down or not get up from a chair recognizing they are going to have a seizure

Seizures Requiring Immediate Medical Care

- Status epilepticus.
- When significant bodily harm occurs.
- If the event is a first time seizure.
- Any seizure lasting greater then 5 minutes requires immediate medical response unless otherwise indicated by the health care provider.

Treatment

There is no known cure for epilepsy/seizures.

- Treatments for management include:
 - Medication
 - Surgical intervention
 - Vagus nerve stimulator
 - Ketogenic diet

Typical Placement of Vagus Nerve Stimulator



Vagus Nerve Stimulation Therapy

Complete seizure control is seldom achieved but the majority of people experience fewer seizures.

- •Used when medications fail to stop seizures
- •Designed to prevent seizures by sending regular small pulses of electrical energy to the brain via the vagus nerve
- •The battery is programmed by the health team to send a few seconds of electrical energy to the vagus nerve every few minutes.
- •A small magnet can be used to stop a seizure by passing it over the device(prescribed by the HCP)

Ketogenic Diet

- Used for children
- High in fat and low in carbohydrates
- Makes body burn fat instead of glucose
- More research needed

Treatment

Medications are used to minimize or block the spread of excess electrical stimuli. These medications are called anti-convulsants or epileptics

- Approximately 70 80% of people use one anti-convulsant to control seizures
- 50%, require two anti-convulsants to control seizures

Treatment

Medication

- Most anti-convulsant medications require time to reach a therapeutic level
- Frequent blood levels should be checked
- Certain people are very sensitive to medication changes.
- Missed doses or medication adjustments can increase the risk of seizure activity



Even with therapeutic blood levels certain events can alter the person's seizure threshold

Stress, emotional upset

- Physical illness or infections
- Temperature changes
- Photosensitivity

Responding to Seizure Activity

To effectively provide support to a person with a seizure disorder, It is crucial to have a response plan in place.

REHABILITATIVE RESOURCES, INC. CARE AND AFTERCARE OF AN INDIVIDUAL WITH A SEIZURE

CALL FOR MEDICAL HELP (911) WHEN:

•If this is a NEW or a CHANGE from the individual's seizure pattern.

•Convulsive seizures lasting more than FIVE minutes.

•The individual does not resume breathing after the seizure. Give CPR.

•The individual has one seizure after another.

•The individual is injured.

CARE DURING A CONVULSIVE SEIZURE:

•REMAIN CALM

•PROTECT HEAD BY REMOVING GLASSES AND SHARP OBJECTS

•LOOSEN CLOTHING AROUND THE NECK

•TURN PERSONON SIDE TO PROTECT AIRWAY

•NEVER PLACE ANYTHING IN MOUTH

•TRACK TIME

FOR A NON-CONVULSIVE SEIZURE (COMPLEX PARTIAL) CARE:

•DO NOT RESTRAIN

•STAY CALM AND TRACK TIME

•REDIRECT FROM HAZARDS

•DO NOT AGITATE, SPEAK CALMLY

•ALWAYS STAY WITH INDIVIDUAL DURING SEIZURE

AFTERCARE:

Do reassure the individual. They may be very tired and require rest. Stay with the individual until they are fully awake and reoriented. Don't offer food or drink until the individual is fully conscious. Follow the individualized seizure protocol for additional care. If this is a **new** seizure or is a **change** from the normal pattern of individual's seizure this would require activating EMS. If an individual is having an increased number of seizures call the HCP. Document seizure using Rehabilitative Resources Seizure Record and medical progress notes.

REHABILITATIVE RESOURCES, INC. INDIVIDUALIZED SEIZURE PROTOCOL

NAME	DOB
TYPE OF SEIZURE	DURATION
LAST SEIZURE	
CALL EMS (911)	
If the individual has one seizure If there is a CHANGE in a seizu	ure pattern yes no
If individual has a seizure who Other or any changes to the ab	ed yes no b has an INACTIVE pattern (greater than one year yes no pove statements
	yes no
Other or any changes to the ab	yes no
Other or any changes to the ab	yes no pove statements
Other or any changes to the ab CALL NEUROLOGIST If the individual experiences If the individual experiences If the seizure last longer than	yes no bove statements seizures in 24 hour period (Number)seizures in a week (Number)minutes who has an INACTIVE pattern (greater than one s
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Rehabilitative Resources Inc. Seizure Tracking Sheet

Name: ______ Month: _____ Directions: Please complete all the information for each seizure occurrence

Year:

Baseline description of seizure:

Month Day Time Time of the day Duration Conscious Unconscious Confused Fell Cyanotic/Blue Muscle Contraction Description Jerking Facial Twitching Eye Starring Chewing Motion Tongue Biting Incontinent Urine or feces Sleepy/Tires **Post Seizure Behavior** Alert Confusion Headache Slurred Speech Increase Activity

Check $\sqrt{}$ if appropriate response / in lower box document duration.

For additional documentation please see reversed side

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1-800-213-5821