

REHABILITATIVE RESOURCES, INC.

UNDERSTANDING SEIZURE DISORDERS IN INDIVIDUALS WITH DEVELOPMENTAL DISABILITIES

There is a high incidence of Epilepsy/ Seizure disorders in individuals with developmental disabilities. An average of twenty-five percent of individuals with MR have a seizure disorder and perhaps as many as fifty percent with MR and cerebral palsy. The risk for seizure disorder increases with a decreasing IQ.

It can be difficult to recognize seizures in individuals with developmental disabilities. Individuals may be non-verbal or have base-line tremors, gazing or behavioral changes which may not be related to seizure activity. It is important to be aware of all-possible signs and symptoms of seizure disorder so we can report and document any changes ensuring quality care for individuals. According to the Epilepsy Foundation of America, in about 85% of the cases, appropriate medication and treatment can successfully control seizures.

DEFINITION

Epilepsy (also known as seizure disorder) is a neurological condition, which affects the individual with varying degrees of consciousness and motor activity. Damage of the brain cells can disrupt the normally smooth-running pattern of electrical activity in the brain causing an electrical overload. This electrical overload can create seizure activity. There are many different types of seizures. Individuals may experience one type of seizure; others can have multiple types of seizures. The kind of seizure depends on the amount of electrical stimuli and which part of the brain is affected by electrical disturbance.

SEIZURE TYPES:

GENERALIZED OR GRAND MAL SEIZURES:

In Generalized seizures the whole brain is affected. The individual may experience loss of consciousness and convulsions (also called tonic-clonic seizures). Motor function, muscle spasm and bladder or bowel control may be effected. Initially the individual may turn pale or blue and appear to stop breathing, but resume breathing. This type of seizure is easily recognized, proper care should be given to protect the individuals airway and head. Remember seizures can never be stopped only allowed to be resolved by the individual having the seizure.

PARTIAL SEIZURES:

Partial seizures are comprised of either complex or simple.

- Complex partial seizures affect a larger area of the brain and they effect consciousness.

During a complex partial seizure an individual is not in control of his movement, speech or actions. Common effects may be a dazed state, drooling and purposeless behavior such as lip smacking or jerking movements.

- Simple partial seizures decrease the consciousness of the individual, but the individual does not lose consciousness.

Individuals with simple partial seizures may have repetitive movements such as, shaking or face twitching over which they have no control. Emotions and sensations may change; they might have a sudden feeling of fear or a sense that something terrible is about to happen.

Partial seizures may be more difficult to recognize. It is important to understand the individual baseline and OBSERVE for any changes. Remember in a seizure NO INTERACTION can take place, if there is question ask the person to do a simple task or tickle him or her to get a response, if there is no response they most likely are having a seizure. It is important with non-verbal individuals to have a baseline of response. This could be a simple act that the individual consistently performs when stimulated; an example would be "Joe will always give me a high five sign when I show him the palm of my hand". This base-line behavior would be used when there is question of seizure activity to determine if the individual is able to respond. If there is no response then a seizure activity is most likely occurring.

Seizure activity is sometimes preceded by sensations, involving the five senses. Such as sound, an unpleasant odor or taste a sinking or rising feeling in the stomach or head or they might have visual disturbance. This is referred to as an "AURA" a sensation before the seizure actually occurs.

PROLONGED SEIZURES:

Seizures can last for prolonged periods of time, a convulsive seizure that last for five minutes or longer requires EMS. Prolonged or cluster seizures sometimes develop into non-stop seizures, a condition called *status epilepticus*. Status epilepticus is a medical emergency. Fortunately, most seizures, even those that are prolonged, end without injury. The important thing is to work with the HCP and have a CLEAR seizure protocol to follow. Seizures are very individualized. Always note the duration and the quantity of seizures.

TREATMENT

- There is no known cure for epilepsy.
- Medications that are used to treat seizures are called anti-epileptics or anti-convulsants. They act by minimizing or blocking the spread of excess electrical discharge to other parts of the brain. Approximately 70%- 80% of individuals taking medications may successfully control seizure activity; about 50% of those will require two anti-epileptic drugs to be seizure free. Many of these medications require blood levels and may take several weeks to become therapeutic. To get the best possible seizure control, medications should be taken everyday, on time, as prescribed. Stopping the medications suddenly for any reason may cause serious rebound seizures. Certain types of seizures are difficult to control even with medication. Stress, emotional upset, and physical illness may lower the seizure threshold and raise the risk of seizure activity.
- Surgery is an option for those individuals who cannot be controlled with medication. This can be effective when an individual always has a seizure in the same cerebral location. It carries many risks and maybe a later option.
- Vagus Nerve Stimulator is a small device that looks like a pacemaker that is attached to the vagus nerve. It delivers a small burst of electrical energy to the brain and it may reduce seizure frequency. Most individuals remain on medication but may be able to reduce the dosage.
- Diet can contribute to a decrease in seizure activity, it is known as a Ketogenic diet. It is low in carbohydrates and high in protein and fats. At present a Ketogenic diet is primarily used in children, but research is going forward to evaluate its potential as treatment for adults.

SOME SIGNS AND SYMPTOMS OF SEIZURES

GENERALIZED OF GRAND MAL-

- Loss of consciousness
- Convulsions
- Initially may stop breathing and turn pale or blue
- Biting of tongue, eyes may roll back into head
- Tonic-Clonic movements- Tonic means stiffing and Clonic means jerking
- Loss of bladder or bowel control
- Has no control of any movement , speech or action

COMPLEX PARTIAL –

- Loss of consciousness, but may appear to awake like in a dream state
- Does not remember what happened during the seizure
- Has no control of any movement, speech, or actions
- Performing simple, unorganized movements over and over again. Actions and movements are typically unorganized, confused and unfocused
- Wandering
- May run in apparent fear or cry out

SIMPLE PARTIAL-

- No loss of consciousness, can remember the seizure
- Can not speak or have control of movements the individual WILL NOT INTERACT
- Eye movements or shifting of facial features
- Shaking of hand or foot which then spreads to arm or leg
- Can be very emotional crying or laughing
- Sudden nausea
- Sweating, flushing or becoming pale
- Usual comfortable sense of familiar things and places may be disrupted

With ANY seizure the individual has no control over any movement, actions or speech