

SEIZURES

Overview

The majority of Arcus clients have a seizure disorder. The cause is generally related to their primary diagnosis and may require medication to decrease the seizures' frequency and duration. It is the Caregivers' responsibility to ensure their clients are safe during and after a seizure. This helps to decrease the risk of complications such as injury or airway obstruction.

SEIZURES

A seizure can be defined as an abnormal and irregular discharge of electricity from millions of neurons in the brain. The discharge stimulates many of the neurons to send impulses over their conduction pathways.

This uncontrolled activity causes symptoms based on the location of the involving area of the brain i.e. involuntary muscle movements, strange sensations and perception, and the loss of consciousness.

A seizure is not a disease but a symptom of an underlying disorder. Seizures may be caused by almost all serious illnesses or injuries affecting the brain, including congenital deformities, vascular lesions, head injury, drug or alcohol abuse, infections and tumors.

Classification

There are two main classifications of seizure, depending on whether a part of the brain (partial) or the whole brain (generalized) is initially involved.

Partial seizures have evidence of a local onset, whereas generalized seizures do not exhibit a local onset.

Partial Seizures

Partial seizures are classified as simple partial or complex partial.

Simple Partial Seizures

Usually involves only one side of the brain and are not accompanied by loss of consciousness or responsiveness. These seizures have also been known as focal seizures.

Complex Partial Seizures

Involve impairment of consciousness and often arises from the temporal lobe.

Complex partial seizures are often accompanied by repetitive non-purposeful activity such as lip smacking, grimacing, patting or continuously rubbing clothes. Confusion following the seizure is common. There may be overwhelming fear, uncontrolled forced thinking and feelings of detachment and depersonalization.

Generalized Seizure

Several types of generalized seizures exist. Clinical symptoms include unconsciousness and involve varying bilateral degrees of symmetric motor responses without indication of localization to one side of the brain. These seizures include: absence, atonic, myoclonic, and tonic-clonic seizures.

Absence Seizures

Have been characterized as a blank stare, motionless and unresponsiveness. There is often a brief loss of contact with the environment. This seizure usually lasts only a few seconds and then the person is able to resume normal activity.

Atonic Seizures

There is a sudden loss of muscle tone leading to a slackening jaw, drooping limb, or falling to the ground; also known as drop seizures.

Myoclonic Seizures

Involves bilateral jerking of muscles either generalized or confined to the face, trunk, or one or more extremities.

Tonic Seizures

Are characterized by a rigid, violent contraction of the muscle fixing the muscle in a restrained position.

Clonic Seizures

Consists of repeated contractions and relaxation of the major muscle groups.

Tonic-Clonic Seizures

A person frequently has a vague warning and experiences a sharp tonic contraction of the muscles with extension of the extremities and immediate loss of consciousness. Incontinence of bladder and bowels is common. Cyanosis may occur from contraction of airway and respiratory muscles. The tonic phase is followed by the clonic phase, which involves rhythmic bilateral contractions and relaxation of the extremities. The tonic-clonic phases last approximately 60 to 90 seconds.

AS A CAREGIVER YOU ARE NOT EXPECTED TO CLASSIFY THE TYPE OF SEIZURE CLIENT IS HAVING. YOUR RESPONSIBILITY IS TO DOCUMENT THE CHARACTERISTIC OF THE SEIZURE ACTIVITY.

Care of a Person during Seizure

- Stay with the person and time the seizure
- Protect client from injury
- Call for assistance
- Ensure the person's airway is clear
- Loosen any restrictive equipment or clothing
- Talk reassuringly to the person during the seizure
- If necessary remove the person from the wheelchair or piece of equipment and position them on their left side (incase rectal medication needs to be administered) in the recovery position
- Continue to monitor airway patency, person's colour, symptoms of the seizure
- Give PRN medication if required and monitor effect. It is especially important to note the time medication is administered. Sometimes there is a repeat order for the PRN medication.
- Administer oxygen if required

After the Seizure

- Remain with the person and reassure them
- Monitor the person's colour and airway, continue with oxygen if the person's colour is poor
- Attend to any injuries that may have been sustained during the seizure
- Place the person either back in their wheelchair or on their bed and make them comfortable
- Document the seizure on a seizure log.

Documenting a seizure on a Seizure Log:

- Time of onset of seizure
- Duration
- Characteristic of seizure activity
- Any cyanosis
- If oxygen is administered
- If a PRN medication has been administered and if effective.
- Any repeat of PRN medication.

** (Refer to attached copy of Seizure Log)

Administration of medication, if needed, is also signed on MAR (part one and two) of form.

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<i>Patho-Physiology: Concepts of Altered Health Status</i>	C.M. Porth	1990	