Epilepsy and Seizure Disorders

DESCRIPTION AND FACTS:

The word “epilepsy” comes from the Greek word for “seizure.” It is a disorder of the central nervous system. Brain cells (neurons) create abnormal electrical discharges that cause seizures, which is the temporary loss of awareness and/or control over certain body functions. The many types of epilepsy are often called seizure disorders. Epilepsy is **not**:

- A disease
- Contagious
- A mental illness
- A sign of low intelligence

It is important to know about epilepsy because it is widespread and is widely misunderstood. Epilepsy affects more than 2 million Americans and can affect anyone. Ignorance and myths about epilepsy often cause more problems for a person with epilepsy than the condition itself.

Tremendous progress has been made! Today, 80% of people with seizure disorders have their seizures totally or partially controlled through continuing treatment. The vast majority of people who have epilepsy or seizure disorders can lead active, self-supporting, normal lives. (Epilepsy does not usually affect a person’s general health.)

A sudden medical problem, such as a high fever, can trigger a seizure in anyone, but this doesn’t mean epilepsy. Epilepsy involves recurring seizures. Scientists know how these seizures occur but they do not know why. We do know that recurring seizures can be related to:

- Damage to the central nervous system before, during or just after birth
- Abnormalities in the brain, present at birth
- Head injuries that can occur at any age
- Poisons including lead and alcohol
- Diseases such as measles and encephalitis
- Disorders of the circulatory system
- Tumors usually in the brain
- Poor nutrition or disturbances in metabolism
- There are many cases where no cause can be identified (these are called “idiopathic.”)

POSSIBLE BARRIERS:

- Muscle spasms
- Mental confusion
- Loss of consciousness
- Uncontrolled or aimless body movements

The two main types of epileptic seizures are generalized seizures and partial seizures. **Generalized seizures** begin with a discharge of neurons throughout the brain. They include:

Tonic-Clonic Seizures:

- Sometimes called “grand mal”
- May occur at any age
- Cause loss of consciousness and stiffening of body, followed by violent jerking of limbs and irregular breathing
- Usually last 1 to 2 minutes
- May occur often (once a day) or seldom (once every few years)
- Not dangerous unless continuous (very rare)

Absence Seizures:

- Sometimes called “petit mal”
- Most common in children ages 6 to 14
- Cause “blank spells” – a loss of awareness, staring, blinking and slight twitching
- Attacks last only a few seconds
- May occur dozens or even hundreds of times a day
- Hard to recognize; may be mistaken for daydreaming or inattentiveness

Partial seizures begin with a discharge of neurons in just one part of the brain. They include:

Simple Partial Seizures:

- May occur at any age
- May be limited to uncontrolled body movements
- May involve brief changes in how things look, sound, taste or feel
- Do not usually affect consciousness

Complex Partial Seizures:

- May occur at any age
- Cause confusion or a loss of awareness, and aimless movements (picking at one’s clothes, lip-smacking, etc.)
- Confusion after a seizure may be prolonged. This is occasionally mistaken for alcohol or drug intoxication

INTERACTION WITH AN INDIVIDUAL WITH EPILEPSY OR SEIZURE DISORDERS:

1. Try to make the individual as comfortable as possible. Embarrassment may occur after the seizure, so the person needs to feel assured that he or she can trust you.

2. Give a safe area around the individual by moving chairs, etc. from the area and call Security (extension 8911) and give your location and indicate the situation.

3. Do not try to physically control the student’s movements while he or she is having a seizure.

TEACHING A STUDENT WITH EPILEPSY OR SEIZURE DISORDERS:

It is crucial that faculty and staff are aware that a seizure could occur at any time. Understanding what to do during a seizure is the best preparation if it happens in your presence.

What to do during an epileptic seizure:

The first rule is to remain calm. There is nothing you can do to stop the seizure once it has begun. Do not try to restrain the individual.

If it is a convulsive seizure, lower the person to the ground or floor if possible and clear the area of furniture to avoid injury. Try not to interfere with movements in any way. Do not force anything between the student's teeth. Loosen ties and shirt collars, and place something soft under the head. When the person regains consciousness, reassure him or her and ask what additional assistance is needed.

All of this may take 10 minutes or less, but the person should be observed until all evidence of confusion has passed. This may mean an hour or so before the person can go home, return to class or drive. The person can be moved as soon as he or she has regained consciousness to a lounge or a less public place until the confused state has passed. Student Health Services (Ext. 9323) is always a good resource to use when this situation occurs. There is an important exception to the general rule of letting a seizure run its course. **If a seizure lasts longer than 10 minutes, or if multiple seizures occur without the person regaining consciousness, treat it as a medical emergency by calling 911.**

For a non-convulsive seizure, no medical attention is typically needed. Stay with the person and gently guide him or her away from obvious hazards. Speak calmly and reassuringly to the person. Stay with the person until he or she is completely aware of his or her environment. Do not grab the person or try to restrain him or her in any way. Non-convulsive seizures are often mistaken for daydreaming, lack of attention, ignoring instructions, poor coordination, intoxication or clumsiness.