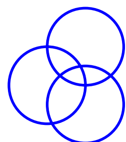

Office of the Ombudsman for Mental Health and Mental Retardation

Seizure Alert

This Medical Alert is based on the work of the Medical Review Subcommittee and should be posted prominently. The Office of the Ombudsman for Mental Health and Mental Retardation works to improve the services provided to people with disabilities by communicating important information found in the Medical Review Subcommittee's reviews of deaths and serious injuries. Thank you for promptly reporting deaths and serious injuries. You are helping us to meet our mission.

Please Post

Overview

Because many of the serious injuries and deaths reported to the Office of the Ombudsman for Mental Health and Mental Retardation involve seizures, the Medical Review Subcommittee (MRS) has developed this Seizure Alert. This Alert will focus on the care of people with a history of seizures who live in community settings. Topics covered will include general information about medications, seizure recognition, first aid, and precautions you can take to reduce the incidence of injury when a seizure occurs.

Epilepsy is the most common cause of seizures, but many other medical conditions can also cause seizures. Medical conditions like diabetes, brain infection, heat exhaustion, pregnancy, poisoning, low blood sugar, high fever, tumors, low oxygen levels, electrolyte imbalance, vascular disease, drug withdrawal, and head injury can all cause seizures. For most people, epilepsy is not a life-threatening disorder. Yet people with seizures can die, from accidents, from status epilepticus (non-stop seizures) and from a mysterious condition known as Sudden Unexplained Death in Epilepsy.[1] Thirty-five percent of people with epilepsy report at least one injury from a seizure.[2] Burns and near-drownings are the most common serious injuries. Drownings occur most often in the bathtub or outdoor pool and usually happen when the client is unsupervised. Burns most often result from stovetop cooking (41.8%) or smoking (20%).[3]

Medications and Seizure Disorders

For more than 80 years, the most effective treatment for people with epilepsy (seizure disorders) has been use of seizure-preventing medications called anticonvulsant or antiepileptic drugs.[4] Medications do not cure epilepsy, but they can help to make it possible for many people to live normal, active lives

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[1] EpilepsyUSA March-April 1998
[2] Ibid.
[3] Ibid.
[4] www.efa.org/answerplace/meds/intro.html

completely free of seizures. Other people may continue to have some seizures but usually not as often. Medications often used for clients with seizure disorders include one or more of the following: Carbatrol, Depakote, Dilantin, Felbatol, Gabatril, Keppra, Klonopin, Lamictal, Mysoline, Neurontin, Phenobarbital[5], Tegretol, Topamax, Trileptal, Valium, Zarontin, and Zonegran.

All medications can cause some unwanted side effects in some people. Anticonvulsant medications can cause some of the following common side effects: drowsiness, fatigue, nausea, vision changes, clumsiness, and rash. Some medications may also affect emotions, activity level (including hyperactivity), memory or the school performance of children.[6] Several epilepsy drugs can cause problems with the liver and blood cells. Some can cause bone marrow depression, which is a life-threatening side effect. When someone is taking several medications they can affect each other and cause a drug interaction. Drug interactions may increase or decrease the effect of the medications on the body. For example, some antiepileptic drugs and birth control pills may interact, making the birth control pills less effective. Women with epilepsy who are considering using birth control pills should discuss this possibility with their doctors.[7]

Please Post

For every medication prescribed for your client, ask the client's healthcare provider to give you a list of side effects to watch for.

Your client's healthcare provider will monitor your client's blood levels of the medication and will order blood studies to make sure your client stays healthy.

Your client's healthcare provider will expect you, as a caregiver, to give the medications to your client as prescribed (5 rights – right ***dose/amount*** of the right ***medication*** to the right ***client*** at the right ***time*** by the right ***route***), to watch your client for possible side effects of the medication, and to record information (see the list of observations to record listed under "Seizure Recognition") about any seizures your client has, so the healthcare provider will know if the medication is working as expected.

Seizure Recognition

The most common signs of possible seizure activity include

- Involuntary jerking of an arm or leg or other body parts.
- Eye deviation (blinking, twitching, eye rolling, eye fluttering).
- Inappropriate movements of the mouth or face accompanied by a blank expression (lip smacking, chewing, swallowing, yawning, spitting).

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[5] See the "Report on the Behavioral Side Effects of Barbiturate Antiepileptic Drugs," originally published by the Office on April, 1995, and available at www.ombudmhdd.state.mn.us/alerts/bul95_3.htm

[6] www.efa.org/answerplace/meds/sidefx.html

[7] www.efa.org/answerplace/meds/othermeds.html

- Nodding, turning, or dropping of head.
- Sudden loss of muscle tone.
- Aimless, dazed behavior, including walking or repetitive movements that seem inappropriate to the environment.

It is possible for people to lose control of their bowel or bladder during a seizure. Shallow breathing or temporarily suspended breathing (breathing that is stopped for a short time) may make the skin and lips turn a bluish color. During a seizure a client may also make unusual sounds like a cry, moaning, barking, humming, snoring, whistling, repetitive words, etc. After a seizure the client may be confused for a time. The confusion may last longer than the seizure did.

When a seizure occurs, it is usually helpful to the client's healthcare provider to record the following observations:

- Did the person have an aura (a peculiar sensation – feeling, odors, colors/patterns/lights – noticed by the client before a seizure)?
- When and how often do the seizures occur?
- Did the client lose consciousness?
- What body parts were involved?
- How long did the seizure last?
- Did the client lose bowel or bladder control or stop breathing?

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First Aid

An uncomplicated seizure in someone who is known to have epilepsy is not a medical emergency. Greater care needs to be taken with clients of the Office of the Ombudsman for Mental Health and Mental Retardation, because there are often other complicating medical conditions present. The following recommendations are from several sources including the Epilepsy Foundation website:

- Lower the client to the ground, and move objects that may cause injury away from the client (for example, furniture or sharp/hard objects).
- Loosen tight clothing.
- Provide privacy.
- Protect the client's head from injury.
- Turn the client onto the side (to prevent aspiration - the breathing in of saliva or vomit).
- Do not put any hard object in the mouth or try to hold the tongue. (It can't be swallowed.)
- Don't try to give liquids during or just after a seizure.
- Do not restrain.
- Don't use artificial respiration unless breathing does not return after muscle jerks stop.

- Be calm and reassuring; provide emotional support.

An ambulance should be called if any of the following happen:

- If the seizure happened in water.
- If there is no medical ID, and no way of knowing whether the seizure is caused by a known seizure disorder.
- If the person is pregnant, injured, or has diabetes.
- If the seizure continues for more than five minutes.
- If a second seizure starts soon after the first has ended (*unless a specific treatment plan has been developed by the healthcare provider for the client with a known seizure disorder*).
- If consciousness does not start to return after the shaking has stopped.

Prolonged or clustered seizures sometimes develop into non-stop seizures, a condition called status epilepticus. **Status epilepticus is a medical emergency. Call 911.**

Please Post

Safety Precautions

The Epilepsy Foundation has an excellent website with lots of helpful information about living with a seizure disorder. Because these are the primary areas that affect the Ombudsman's clients, bathroom and kitchen safety are covered in this Alert. More information about safer houses, workplaces, transportation, recreation, and children is available at www.efa.org.

Along with its Summer Alerts, the Office of the Ombudsman for Mental Health and Mental Retardation distributes a Water Safety Alert.[8] Please refer to it for more detailed water safety recommendations. **For people with a history of seizures, it is important to make sure that they never swim alone and are never on a boat or near water without wearing a flotation device or life jacket**.

Bathroom Safety – Preventing Falls, Drownings, and Burns:

- Make sure that bathroom doors are installed so they open outwards - so that if someone falls against the door, it can still be opened.
- Hang an "Occupied" sign on the outside handle of the bathroom door instead of locking it.
- Regularly check that the bathroom drain works properly before bathing or showering.
- For people who fall frequently during seizures, use a shower or tub seat with a safety strap.

[8] "Water Safety Alert" at www.ombudmhdd.state.mn.us/alerts/08water.htm

- Keep water levels low in the tub. If clients have seizure disorders that are not well-controlled, **do not leave them unattended.**
- Set water temperatures low (under 120 degrees Fahrenheit) to prevent scalding.[9]
- Avoid using electrical appliances such as hair dryers or electric razors in the bathroom or near water.

Kitchen Safety – Preventing Spills, Cuts, and Burns:

- Slide containers of hot food along the counter instead of picking them up; use a cart when taking hot foods or liquids from one room to another.
- Use plastic dishes and cups with lids.
- Use a microwave oven for cooking.
- When using the stove, use the back burners as much as possible.
- Remove burner controls from gas or electric stoves when not in use.
- Use long, heavy-duty oven mitts or holders when reaching into a hot oven.
- Wear rubber gloves when handling knives or washing dishes and glassware in the sink.
- Use plastic rather than glass containers as much as possible.
- Do not allow vulnerable clients to cook without supervision.

- Case Studies -

Could this happen to one of your clients?

Case Study #1

Please Post

A 32-year-old woman, with major depressive disorder, mild mental retardation, and a seizure disorder, died in an adult foster care home. A week before her death, she had been discharged from the hospital after an eight day stay. During her hospitalization, she had received significant changes to her prescriptions for anticonvulsant medications. Her situation was complicated by the question of whether she was having pseudo seizures. Two days before her death, her case manager and adult foster care provider had consulted about concerns regarding the client's actions. These actions included drooling, periods of eating poorly, and times when she went outside without clothing adequate for the season. The night before her
death she had fallen out of bed and was helped back to bed. On the morning of her death, she was again found on the floor in a sleeping/drooling state. The foster care provider called the client's physician but only reached voice mail. The provider then called the case manager. The case manager suggested calling 911. Shortly thereafter, the provider went to administer medications and found the client unresponsive, not breathing, and with clenched jaws. 911 was then called. The client was pronounced dead at the home. The death was reported to the medical examiner, and an autopsy was performed. The manner of death was natural and the immediate cause was probable seizure disorder. Following its investigation, the licensing agency found that the foster care provider on duty did not obtain medical care for the Vulnerable Adult (VA), and the allegation was substantiated as to neglect of the VA. The MRS noted in its review of the

[9] Please see the "Burn Injury Alert" at www.ombudmhdd.state.mn.us/alerts/burn.htm

case that the significance of the client's medication change was likely unrecognized by the AFC staff. The MRS also noted that gaps in service to clients occur when minimally trained residential staff are expected to provide a medical model of care.

Case #2

This 25-year-old man, with organic brain disease, borderline personality disorder, and Type I diabetes mellitus, died in his community hospital, nine days after he had been found unresponsive in the waivered group home in which he had lived. The facility nurse was called and performed a blood glucose check, which was 16 [dangerously low]. 911 was called, and the client was transported to his community hospital. When staff at his community hospital were unable to stop his seizures, he was transferred to a regional hospital. He was placed on a ventilator and never recovered. The client had been working with a diabetes specialist and diabetes educator, so it was important for recommendations and doctor's orders to be communicated to staff. In the documentation provided by the facility there appeared to have been a specific instruction to test the client's blood sugar at 2:00 AM weekly and when the 10 PM check was less than 100. This instruction did not appear on the client's medication record and so was not readily available to the group home staff who provided care for the client. Following its review, the MRS recommended that all specific medical instructions made for the care of a client be written in the form of "doctor's orders" and be reflected on the Medication Administration Record, so that staff have ready access to the information. **The MRS recommended that whenever a client is found unresponsive, 911 should be called immediately**. While a facility policy may direct staff to call the nurse or to notify supervisory staff of an incident, **always call 911 first for unresponsive clients**.

Please Post

References:

Epilepsy Foundation website – www.efa.org

EpilepsyUSA March-April, 1998 and Nov-Dec 1996.

Tucker et al, Patient Care Standards: Collaborative Planning and Nursing Interventions, 7th Edition, Mosby Publishing.

Virtual Hospital: University of Iowa Family Practice Handbook, 4th Edition, Chapter 9 -- Neurology: Seizures http://www.vh.org/Providers/ClinRef/FPHandbook/Chapter09/04-9.html and Chapter 2 – Emergency Medicine: Seizures, http://www.vh.org/Providers/ClinRef/FPHandbook/Chapter02/02-2.html

Website of the Office of the Ombudsman for Mental Health and Mental Retardation: www.ombudmhdd.state.mn.us