Effects of Cerebellar Stroke

A stroke, also called a cerebrovascular accident or CVA, happens when an artery in your brain is blocked. Arteries carry blood that contains oxygen to the parts of the body, including the brain. The flow of blood through the arteries can stop if the artery is blocked. This handout looks at what occurs when a stroke happens in the part of the brain called the cerebellum.

The cerebellum is the lower part of the back of the brain. The basilar artery divides into several other arteries that bring oxygen to the right and left sides of the cerebellum. The cerebellum coordinates body movement, controls eye movement and adjusts posture to stay upright. Based on where the blockage occurs with a stroke in this part of the brain, the effects will vary. Damage can cause changes in:

- Movement and sensation
- Balance
- Speech and Swallowing
- Vision

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Changes in Movement and Sensation

This type of stroke can cause **ataxia** that is the loss of coordinated movement. When the person moves, he or she may have tremors or problems starting or ending movements. The person may have trouble putting their arms and legs where they want them. For example, the person may try to pick up a cup, but when they reach for the cup they miss it. Or when walking, they may step far out to the side. They are not sure where they should place their foot.

Ataxia may also be in the muscles of their trunk. This often happens on the same side of the body where the cerebellum damage occurred.

A less common change is decreased sensation to pain and temperature. This can be on one side of the body or both.

Changes in Balance

Problems with balance are common. The person may fall towards the side where they have the ataxia. Safety is important because persons with this type of stroke are more likely to fall or have other accidents.

**Vertigo** is dizziness or the sensation that the body is spinning when the person is not moving. It can also cause the person to have nausea or vomiting.

Changes in Speech and Swallowing

If the muscles in the mouth and throat are affected, problems can occur with speaking and swallowing. The voice may be hoarse and the person may not be able to speak loudly. Diet changes may be needed to avoid choking or other problems with swallowing.

Changes in Vision

Rapid eye movements called **nystagmus** can happen when the person moves in certain directions. This may add to the problem of dizziness called vertigo.
Eye problems can occur on the side of the cerebellar damage. The person may have a small pupil, a droopy eyelid, or problems moving the eye to look to the side.

Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.