**Posterior Cerebral Artery (PCA) Stroke**

Arteries carry blood that contains oxygen to the brain. The flow of blood through the arteries can stop if the artery is blocked or bleeds. This is called a stroke. It is also known as a cerebrovascular accident or CVA. This handout looks at when a stroke happens in the posterior cerebral arteries (PCAs) of the brain.

If a PCA becomes blocked or bleeds, a large part of the back of the brain loses its supply of blood and oxygen. This can affect the patient’s:

- Vision
- Memory
- Judgment
- Alertness and ability to focus on a task
- Body movement
- Body sensation
- Speech

PCAs divide into smaller artery branches. Based on where the blockage occurs in the artery or in the branches, the effects will vary. If the block is at the start of the artery, the patient will have more symptoms than if the block is only in one branch.

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Changes in eye movement
A PCA stroke can affect vision and how the eyes work. A stroke in this artery can stop the messages sent from the eye to the brain. It is common to lose part of the field of vision in one or both eyes.

Changes in memory
Problems with memory are common. The patient may easily remember things that happened years ago, but can not remember current tasks. It may be hard for him or her to form new memories or recognize familiar faces. This can be very frustrating. To reduce confusion and anxiety, the patient may make up stories to explain things around him or her.

- For example, you think you are visiting someone in the hospital when you are the patient getting treatment.

Changes in judgment
A PCA stroke can also affect judgment. The patient may have trouble knowing where items are placed in a room.

- For example, you may think a chair is next to you, when it is across the room.

Changes alertness and focus
Changes in alertness may also occur. The patient often will sleep more than normal and become very tired with very little activity. When the patient is awake, it can be hard to stay focused.

- For example, if you have a dinner tray, you may only focus on one item and not be able to pay attention to the rest.

Changes in body movement
Problems with movement are common. The changes in movement or weakness can be on the right or left side of the body. It depends on where the stroke occurred in the artery. When the body is unable to coordinate how the muscles move together, it is called as ataxia (a-tax-ee-a).
For example, you may fall because you are not able to put your foot where you want to walk.

Ataxia can affect arms, legs and chest muscles. It can lead to uncontrolled body shakes called tremors. Tremors often occur when the body starts or stops. Preventing falls or other accidents are safety concerns.

**Changes in body sensation**

After a stroke, it can be hard for the patient to feel touch or know where he or she is being touched. These changes may occur in the face on the same side of the stroke and in the body on the opposite side. It is less common to have greater sensitivity, or hypersensitivity.

- For example, a light touch or change in temperature can hurt. Pain may last after the touch stops.

**Changes in speech**

Problems with speech and understanding language called aphasia are common with this type of stroke.

- **Non-fluent aphasia** – The patient will have trouble speaking words out loud. Their sentences are short and missing words. Instead of saying, “I want to take the dog for a walk,” he or she would say, “Dog walk.” Their speaking will be very slow and difficult.

- ** Fluent aphasia** – The patient speaks in full sentences but will say the wrong words or made up words. Instead of saying, “I want to take the dog for a walk,” they would say, “I used to take the cars for a salk.”

- **Global aphasia** – The patient has problems with speaking and understanding what is said to him or her.

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.