

Example of essay on central nervous system injuries

[Sociology](#), [Violence](#)



Cardiovascular Diseases

The temporal lobe of the brain is located below and behind the frontal lobes of the brain. The temporal lobe functions in processing cognitive functions and emotional functions. It also takes part in the processing of memory, its storage and retrieval (Brogaard, 2010). In addition, processing of speech and language are parts of the functions of the parietal lobe. It also functions in recognition of shapes and individual's faces. Because of these, injury to the temporal lobe would cause problems like difficulty in remembering and recognizing faces (Brogaard, 2010). Information pertaining to this is processed by the hippocampus, responsible for short and medium term memory storage and the amygdala, responsible for processing emotional stimuli. Both of these structures are located in the temporal lobe. Problems with short-term memory may also arise due to disruption in the function of the hippocampus. The hippocampus is involved in transforming short-term memory into long-term memory. Speech and language challenges can also arise. The language center is usually found on the left temporal lobe. Seizures could also result from a lesion in the temporal region. Behavioral changes that can also occur include loss of sense of humor and obsession with particular activities or objects. (Brogaard, 2010)

The functions of the parietal lobe include sensory functions as perception of touch, location for visual attention. Cognitive functions as goal-directed voluntary movements are also part of the functions of the parietal lobe of the brain. It also functions in the process of manipulation of objects. It is also an integrative centre for the different sense modalities that gives a holistic view of the percept.

Injury to the parietal lobe of the brain, however, leads to loss of the ability to perceive more than one object at a time. Anomia, the inability to name objects also develops. Agraphia is the loss of the ability to find words for writing. This symptom also develops. The individual also experiences an inability to draw objects. The individual loses the ability to distinguish right from left. Dyscalculia is the loss of the ability to do arithmetics; it is also one of the symptoms of parietal lobe injury. There could also be a lack of awareness of particular body parts; this can lead to deterioration in self-care. The patient can also have trouble with visual percept. The individual is also likely to have problems with the coordination between the hand and eye. The medulla oblongata is the part of the brain that is responsible for the regulation of the body's rate of breathing, heart rate, blood pressure, the digestive and circulatory system activity. The medulla oblongata is also responsible for regulating the movement and tone of muscles of the body. It also acts as a conduit for sensory information transportation from the internal organs of the body to the brain. Reflexes of the body are also initiated in the medulla oblongata. Reflexes like vomiting, gag, cough, and hiccup and swallow reflexes (Well, 2011).

In view of these functions, damage to the medulla oblongata would mean that the nerves that pass through it to the brain from the internal organs are paralyzed. In addition, muscle coordination is also affected adversely. Sensory perceptions like touch, temperature and pain are also lost as it would be impossible for the individuals to perceive these tactile senses any longer. Because of decussation of nerve fibers in the medulla, symptoms

originating from the left side of the medulla oblongata appear on the right side of the body (Well, 2011).

References

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