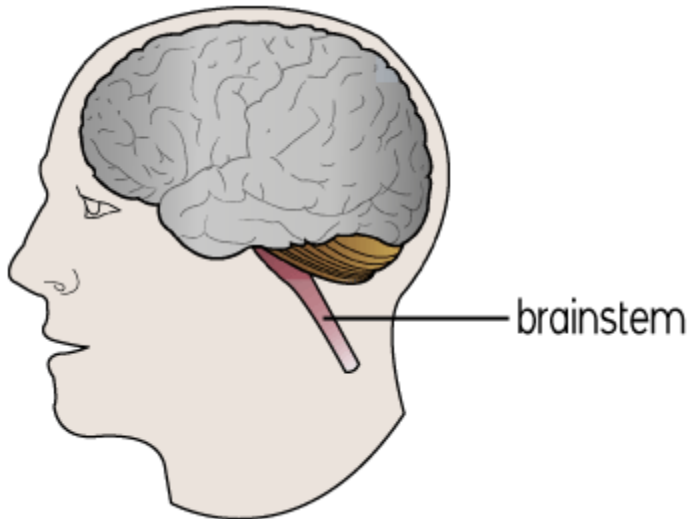


Brainstem and Thalamus

The brainstem is like a tube that begins underneath the brain and extends down until it becomes part of the spinal cord. It has three areas: the midbrain, pons and medulla. The brainstem is very important because it handles automatic functions like breathing and heart rate.



The thalamus is a small structure located slightly above the brainstem. It is the gateway for most of the sensory pathways. The thalamus plays a role in regulating awareness and emotional aspects of sensory experiences (reaction to fear or hunger, for example).

Symptoms of brainstem and/or thalamus injury depend on the extent and specific location of the injury.

The following symptoms may occur:

- problems controlling blood pressure
- problems with sight and eye movement
- problems with breathing
- problems closing eyes and moving face
- decreased wakefulness/arousal
- problems with hearing and balance
- problems swallowing or coughing

Another condition that may occur when there are injuries near the brainstem and thalamus is “storming.” Storming is also called hypothalamic instability or paroxysmal sympathetic storms. A storming episode may happen as a result of a stimulus or when the person is resting quietly. It may last several minutes and can happen at various times throughout the day.

Signs of storming include an increase in heart rate, temperature and sweating. There also may be a rise in the blood pressure and muscle stiffness or rigidity during the episode. Storming happens

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because the injured brain is having difficulty controlling “automatic” bodily functions. Episodes of storming often decrease as the brain heals and the person becomes more responsive. Sometimes the doctor may order certain medicines to help decrease some of the symptoms of storming.