

BEHAVIORAL PROBLEMS OF TBI

Behavioral problems of people with traumatic brain injury (TBI) complicate recovery. The list of behavioral dysfunction ranges from emotionally labile (mood swings), depression, and hyperactivity to aggression, sexual inappropriateness, and elopement (running away). Even lack of activity, or lack of initiation, can be a behavioral problem. In addition, psychological reactions to traumatic brain injury as well as predisposition to psychiatric abnormalities can be factors in behavioral complications. The locus of the traumatic brain injury is the key predictor of behavioral problems, as shown in the following diagram.

FRONTAL LOBE (behind the forehead)

An injury to this part of the brain can cause changes in emotional control, initiation, motivation, and inhibition. Intolerance for frustration and easily provoked aggressive behavior are typical. Promiscuity and lethargy may also result. An injury to the frontal lobe can lead to the inability to plan a sequence of complex movements needed to complete multi-stepped tasks (such as making coffee).

TEMPORAL LOBE (side of head above ears)

Aggression resulting from temporal lobe damage is typically unprovoked and very abrupt. Damage here causes both long-term and short-term memory loss and difficulty in new learning, affecting a person's ability to relearn appropriate behavior. Right lobe damage can cause persistent talking.

LIMBIC SYSTEM (deep inside the brain)

Damage to this area, distorts emotions and physical desires and leads to difficulty with organization/perception of the environment and problems with balance and movement. Damage can also cause decreased vital capacity in breathing, important for speech.

CEREBRAL CORTEX (gray matter)

The cerebral cortex is the layer of cells on the outer surface of the cerebral lobes. A diffuse impact injury, such as with a motor vehicle accident, where the head is subjected to rapid and forceful movements, can impair the brain's ability to process emotions and behavior.

PARIETAL LOBE (near the back and top of the head)

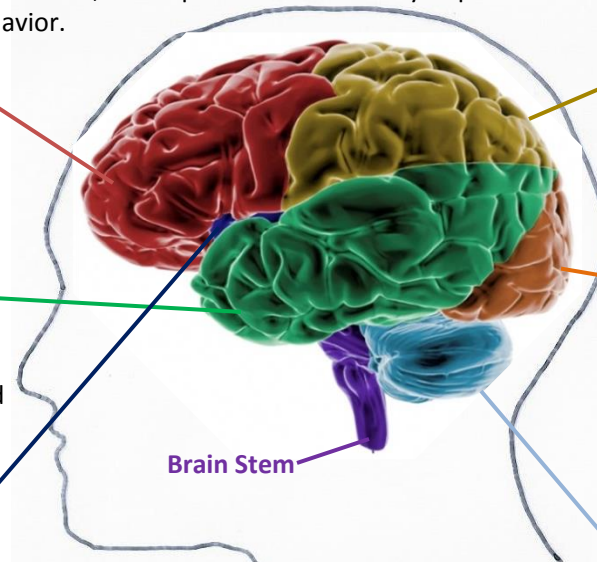
The parietal lobe is specialized for processing body information. Damage to the parietal lobe impairs the ability to identify objects by touch, increases clumsiness and neglect on the side of the body opposite the damage and creates an inability to draw and follow maps and describe how to get somewhere.

OCCIPITAL LOBE (located at the posterior end of the cortex)

The occipital lobe's main function is vision. Damage to this area causes degrees of blindness, difficulty with locating objects in environment, identifying colors, produces hallucinations, inability to recognize words or to recognize the movement of an object and difficulties with reading and writing.

CEREBELLUM (base of skull)

Injury to the cerebellum can result in the loss of ability to coordinate fine movement, loss of ability to walk, and the inability to reach out and grab objects.



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