An Overview of Brain Conditions

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Introduction

After a severe injury or illness that affects the brain, patients can fall under a persistently unconscious state, rendering them unaware of themselves or their environment. Counting on their level of consciousness, patients are considered to be comatose, during a minimally conscious state, during a persistent vegetative state, or dead. Within the first three situations, these states can dictate treatment also as the way to prepare relations for decisions regarding the patient's prognosis and quality of life. When someone suffers traumatic brain injury, coma and cerebral death are two possible outcomes. Although coma sometimes progresses to cerebral death, the 2 injured states are distinct and characterized by very different symptoms.

Coma

In this state, the thalamus, the brainstem, or both hemispheres of the brain are damaged. Patients can't be awakened, are unresponsive to stimuli like pain, sound, or touch, and don't experience sleep-wake cycles. If the lower a part of the brainstem has also been damaged, the patient often requires a ventilator to breathe. It's caused by a severe brain injury like a traumatic head injury, brainstem stroke, or a brain hemorrhage that affects the encompassing tissue and brain structure, also as severe hypothermia, drug overdose, drowning, and asystole. Regaining consciousness depends on the cause and severity of the injury and the way long the coma lasts. Most patients eventually awaken to a point. Patient care is individualized, and includes physiotherapy and rigorous medical care.

Minimally Conscious State

In this state, patients are intermittently conscious of their surroundings and should answer commands. Although they're mostly drowsy and unresponsive, they'll have moments where they mouth words, react to pain, hold an object, answer commands, or track movement with their eyes. Patients may improve gradually, especially those that have some ability to talk. It's still difficult to predict, however, what proportion they will improve beyond a serious disability.

Persistent Vegetative State

In this state, patients exhibit no signs of perception and communication or awareness of self. Because brainstem functions that affect breathing and involuntary movements remain intact, patients could also be ready to breathe on their own and open their eyes, experience sleep-wake cycles, grind their teeth, thrash, or make facial movements. If a patient is comatose for several weeks, which rarely happens, he or she is taken into account to be during a persistent vegetative state, which may become permanent. Patients may remain during this state for many years if all medical complications are treated aggressively.

Brain Death

This condition, which may be caused by severe injury or lack of oxygen to the brain, involves these critical factors: coma; a permanent cessation of activity within the brain and brainstem, the explanation for which is understood and that there are not any other explanations; and no ability to get a breath. The hearts of brain-dead patients may still beat, but removing supportive equipment will cause asystole.

Conclusion

Individuals during a state of coma, regardless of how severe or prolonged, are considered legally alive. Once a patient is pronounced dead, however, nothing more are often finished them. Consistent with federal regulations, the family must tend to option of organ donation. If the family refuses, caregivers discontinue all artificial means of keeping the patient alive, and therefore the heart stops beating.

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