

CBD and Stroke or TBI

Stroke and TBI

In addition to the physical deficits individuals with TBI may show symptoms of memory loss, aggression, confusion and depression, which may appear years or many decades after the trauma. In the case of blast injury, a single exposure to a blast and the subsequent violent movement of the head in the blast wind can cause the condition.

Ischemic Cascade of Neuronal Cell Death

Secondary injury of the brain is the damage that occurs seconds, minutes, hours, or even days after the traumatic event and may even be superimposed on a mechanical injury. Because of the primary injury, oxygen and nutrients are not delivered to brain cells. Hypoxia causes dysfunction in normal cellular metabolism, and neurons die. Cellular ion pumps fail, leading to anaerobic metabolism and buildup of lactic acid. Calcium ions flow into the neurons. Glutamate is released and more calcium enters the cells. Excess calcium causes free radicals and excess enzymes damaging cell membranes, mitochondria break down, and cellular death occurs. When cells die, more glutamate is released, more cells in the area are injured, edema increases, and the cascade spreads to undamaged neurons.

CBD stops this process and protects neurons as noted in this document. U.S. patent U.S. Patent 6,630,507 assigned to The United States Of America As Represented By The Department Of Health And Human Services. "Oxidative associated diseases include, without limitation, free radical associated diseases, such as ischemia, ischemic reperfusion injury, myocardial ischemia or infarction, cerebrovascular accidents ..., spinal cord trauma, ...hypoxic or anoxic neuronal damage... caused by drowning, brain surgery or trauma."

Suggested amount is 60 mg tincture per day for acute and symptomatic conditions and 15 mg for prevention. Liposome form would be 5-10 mgs.

