

Anoxic Brain Injury: Hypoxic-Ischemic Encephalopathy

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Hypoxic-ischemic encephalopathy (HIE) is a condition in which the brain does not receive enough oxygen on a global basis. Since brain cells die when deprived of oxygen within minutes, HIE can result in serious injury or death. HIE is most often mentioned in connection with birth injuries to newborns, but can also be caused by a multitude of other events that result in reduced blood flow and reduced oxygen supply to the brain.

HIE results in a biochemical crisis for brain cells, in which the uptake of neurotransmitter chemicals is impaired, leading to cell necrosis and death. The longer and more severe the initial injury, the more neuronal damage that typically follows. Consequently, the effects of HIE can range from mild (such as subtle problems with concentration, attention and memory) to severe (such as cerebral palsy) to death.

Treatment for HIE involves initial resuscitation, maintenance of adequate ventilation, stabilization of blood pressure, correction of metabolic imbalances, and use of medications for resulting conditions such as seizures and low blood pressure. After the stabilization period, the patient should be closely monitored to determine what impairments exist and how to best manage such impairments.

Trial attorneys often represent individuals who have suffered HIE. Such cases include birth injuries, caused by such conditions as umbilical cord strangulation, uterine rupture, or hypotension; anesthesia mishaps; uncontrolled hemorrhages; smoke inhalation; drowning and near drowning; and choking. It is thus essential for the trial attorney to have a basic understanding of the etiology, process and effects of hypoxic-ischemic encephalopathy.