Hypoxic and Anoxic Brain Injury



What is hypoxic and anoxic brain injury?

Hypoxic and anoxic brain injury is a type of acquired brain injury that occurs when cells in the brain do not receive enough oxygen. These injuries are very similar but have slightly different causes. A hypoxic injury occurs when the brain is still able to receive some amount of oxygen, but does not get enough. An anoxic injury occurs when oxygen is cut off completely from the brain.

Like all parts of the body, the brain needs oxygen in order to function. Any disruption in oxygen flow to the brain can lead to severe health consequences and even death. Continue reading to learn about the symptoms, causes, and treatment options available for hypoxic and anoxic brain injury.

What causes hypoxic and anoxic brain injury?

There are many ways a person can sustain a hypoxic or anoxic brain injury. Common causes include:

- Near-drowning.
- Electrical shock.
- Heart attack.
- Choking.
- Carbon monoxide poisoning.
- Suffocation.
- Strangulation.

- Smoke inhalation.
- Overdose.

If a person is cut off from oxygen as a result of any of these events, they may be unaware that they have sustained a brain injury. Because of this, it is important to understand and be aware of the immediate symptoms so that they can receive immediate medical intervention.

What are the short-term symptoms?

Like many other forms of brain injury, hypoxic and anoxic injuries can present a range of symptoms that vary from person-to-person. Symptoms can include:

- Trouble concentrating.
- Poor coordination.
- Headaches.
- Dizziness.
- Light-headedness.
- Confusion.
- Loss of consciousness.
- Skin appearing blue.

If a person has experienced a loss of oxygen and is exhibiting any of the symptoms listed above, they should seek medical attention. Getting swift medical intervention and a prompt diagnosis can help to lessen long-term impacts.

What are the long-term impacts?

Depending on the severity of the injury and what part of the brain was affected, a person may experience **long-term effects** of their injury. These can include:

- Disturbances in motor function.
- Spasticity.
- Tremors.
- Cortical blindness.
- Memory problems.
- Speech impairments.
- Increased irritability and frustration.
- Fatigue.
- Low blood pressure.

For some, long-term symptoms may improve or go away over time. For others, the effects of their injury can be a lifelong effort.

Treatment Options

No two people who sustain a brain injury will experience the same symptoms or face the same challenges in recovery, so treatment paths will vary. Treatment and rehabilitation options will be determined after meeting with a medical professional who can determine the severity of the injury. They will also evaluate what area or areas of the brain were affected when the brain was cut off from its oxygen supply.

Recovery is possible for many people who sustain a hypoxic or anoxic brain injury. A doctor may recommend a rehabilitation program or certain medications.

© 2022 Brain Injury Association of America. All Rights Reserved.