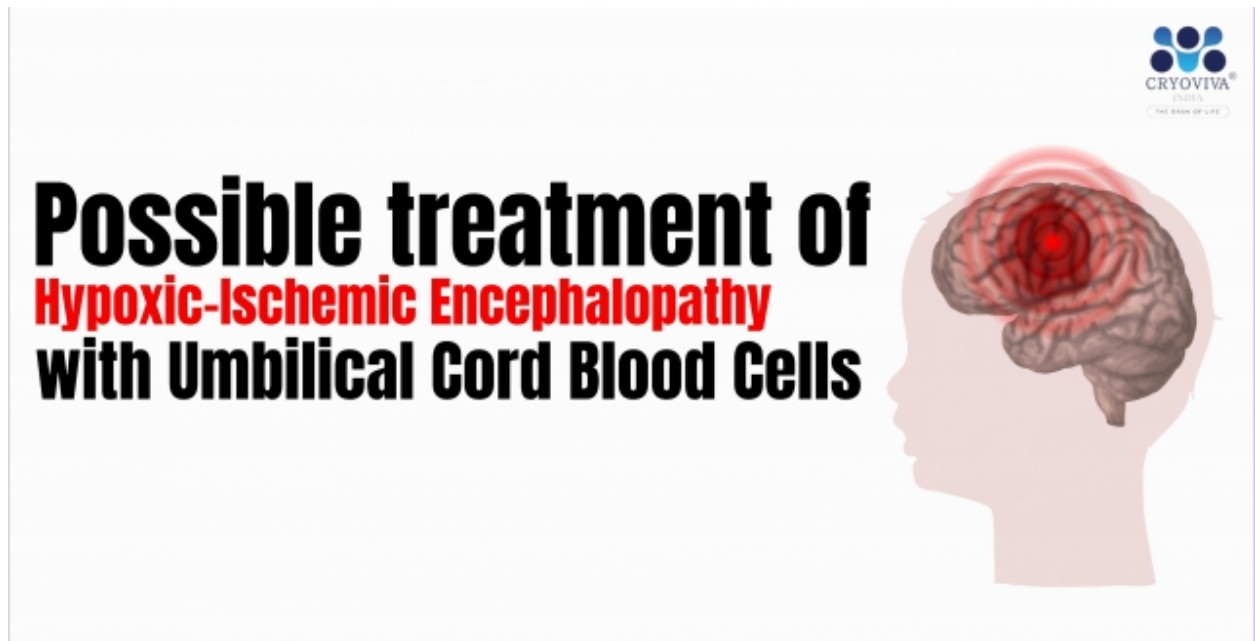




Cryoviva Biotech Pvt Ltd.

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# Treating Hypoxic-Ischemic Encephalopathy with Umbilical Cord Blood Cells



by **Avantika Singh**

Hypoxic-ischemic encephalopathy (HIE) is diagnosed when your baby's brain doesn't get sufficient oxygen or blood flow during the birth. It is also referred to as asphyxia, perinatal asphyxia, or birth asyphxia.

Usually, the condition affects the brain, but the effects of low oxygen may start affecting the functioning of the lungs, heart, liver, bowel, and kidney. Let's understand more about this condition and how [stem cell therapy](#) revives the hope of curing children diagnosed with HIE.

# Diagnosis of Hypoxic-Ischemic Encephalopathy

The diagnosis of hypoxic-ischemic encephalopathy can be graded as mild, moderate, and severe. Now, children with mild HIE recover quickly, and it requires a little monitoring to ensure the child is stable.

However, the case with moderate or severe HIE is different as there is a risk of death or long-lasting damage to the brain. To reduce the risk, the baby will receive a treatment called therapeutic hypothermia. Besides, here are conditions that babies with HIE might develop:

- Cerebral palsy
- Epilepsy
- Learning or behavioral difficulties
- Eyesight and hearing problems

## New Hope for Little Ones: Special Blood Stem Cells to Treat HIE

When babies face a serious brain issue called hypoxic-ischemic encephalopathy (HIE), there's new hope in the treatment of HIE, which is umbilical cord blood stem cells. The treatment involves utilizing the baby's umbilical cord blood, which is comprised of precious stem cells. These cells have a miraculous power to repair the damage done by not receiving enough oxygen or blood when being born.

When a baby doesn't receive the right quantities of oxygen or blood during birth, it can damage the brain. The [stem cell research](#) says we can make things better with umbilical cord blood cells. These special cells are little repairmen for the brain. They can enter, ensure the upregulation of neuronal stem cells, and reduce brain damage.

## Benefits of Stem Cells for Treating Hypoxic-Ischemic Encephalopathy

Here are the major benefits of stem cells(Umbilical Cord Blood Cells):

### **Regenerative Power:**

Cells from the umbilical cord have unique regenerative powers that can repair damaged brain tissues as a result of hypoxic-ischemic encephalopathy (HIE).

### **Neuroprotective Properties:**

For the fragile nerve cells, these cells provide a shield against harm. They are healthier in such an environment.

### **Anti-Inflammatory Effects:**

Cord blood cells from the source of stem cells reduce the level of inflammation in these areas, reducing HIE.

### **Improved Blood Flow:**

Human stem cells promote better blood flow, which is vital to getting oxygen and nutrition into the brain. This promotes recovery in babies with HIE.

### **Minimized Neurological Deficits:**

This use of umbilical cord blood cells for stem cell treatment has shown itself to be more effective in reducing long-term neurological deficits, perhaps giving a lifeline for HIE infants.

### **Wrapping up**

The therapeutic potential of umbilical cord blood cells for hypoxia-ischemia encephalopathy evokes a ray of hope in the darkness facing affected infants. Its regenerative, neuroprotective, and anti-inflammatory properties offer the potential for better outcomes.

Cryoviva is a pioneer in stem cell preservation, assisting the parents in preserving the baby's umbilical cord blood, which can give a new life to the baby. Stem cells hold the cure for around 80+ diseases, and one of them is HIE. Schedule an appointment with our experts and take a step in the right direction to secure your baby's future.

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