Hydrocephalus

What is Hydrocephalus?

Hydrocephalus, sometimes called “water on the brain”, is a term for conditions that cause fluid in the brain and spinal cord to build up in the brain. Excess fluid causes potentially harmful pressure on the tissues of the brain. If left untreated, hydrocephalus can lead to brain damage, loss of mental and physical abilities, and death. Hydrocephalus is believed to affect approximately one in every 500 children.

What causes Hydrocephalus?

Hydrocephalus is often congenital, something a baby is born with, but it can also be an acquired condition, where it develops during or after birth.

**Congenital hydrocephalus:** This may be caused by an event prior to birth, such as bleeding in the baby’s brain, infections in the mother, or by genetic abnormalities, such as spina bifida

**Acquired hydrocephalus:** Acquired hydrocephalus is caused by injuries or conditions that develop after birth, such as a brain hemorrhage (bleed), meningitis, head trauma, tumors and cysts.

What are the symptoms of Hydrocephalus?

Symptoms of hydrocephalus can vary depending on the age of the child at diagnosis and how long the condition has been present.

**Infants with hydrocephalus may have:**
- Unusually large head size with bulging fontanel (soft spot)
- Unusual and prolonged sleepiness
- Frequent vomiting
- High-pitched cry
- Seizures

**Older children with hydrocephalus may have:**
- Severe headaches with nausea and vomiting
- Blurred or double vision
- Problems with balance and coordination
- Lethargy or sleepiness
- Slowing or loss of developmental progress
- Sudden changes in personality

How is Hydrocephalus diagnosed?

A doctor should evaluate a child who shows any signs or symptoms of hydrocephalus right away. The doctor may suspect that a baby has congenital hydrocephalus if the baby’s head is larger than normal. The doctor will perform examinations, which may include a medical history and neurological evaluation and may order diagnostic tests such as ultrasound, CT scan or MRI.

What is the treatment for Hydrocephalus?

Treatment depends on the age of the child and the cause of the excess fluid. Hydrocephalus is most often treated by surgically inserting a shunt to drain the excess fluid into body spaces where it can be drained and absorbed by the blood. A valve in the shunt controls the flow of fluid.

The key to treating a child with hydrocephalus is early detection, prompt treatment and diligent care to monitor the shunt. Many children with hydrocephalus benefit from rehabilitation therapies and educational interventions, and lead normal lives with few limitations. Treatment by a team of medical professionals, rehabilitation specialists and educational experts is critical. Treatment of children with hydrocephalus is life-saving and life-sustaining. Left untreated, progressive hydrocephalus is usually fatal.

References: [www.ninds.nih.gov/disorders/hydrocephalus/detail_hydrocephalus.htm](http://www.ninds.nih.gov/disorders/hydrocephalus/detail_hydrocephalus.htm); [www.childrenshospital.org/az/Site1116/mainpageS1116P1.html](http://www.childrenshospital.org/az/Site1116/mainpageS1116P1.html)

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