

What is hydrocephalus?

Treatment options

To understand hydrocephalus, one must first be familiar with the normal circulation of cerebrospinal fluid (CSF). CSF is fluid that flows throughout the brain and spinal cord. It is reabsorbed within the body and more is produced.

Hydrocephalus develops when there is either a disruption of CSF flow or a problem with CSF absorption. These disruptions lead to an excess amount of CSF in the ventricles (fluid-filled spaces of the brain) causing pressure to build within the brain. This pressure is what causes the symptoms of hydrocephalus.

There are two types of hydrocephalus

Obstructive

- Tumor or other mass lesion blocking the normal CSF flow
- Pathways for CSF flow are too narrow, which causes fluid to back up

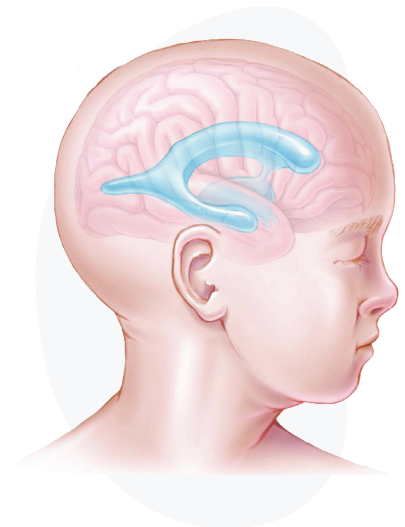
Communicating

- The body is producing CSF but not reabsorbing it as it should, leading to an excess amount of CSF
- Infection within the brain and/or spinal cord can alter the absorption of CSF
- Intraventricular hemorrhage (bleeding within the brain) may also alter the absorption patterns of the CSF—common in premature infants
- Following surgery to remove a brain lesion (surgery itself can disrupt absorption)

What are the signs & symptoms?

The symptoms of hydrocephalus are caused by the increased pressure within the brain.

- Headaches
- Vomiting
- Sleepiness
- Bulging soft spot in infants
- Decreased appetite
- Increase in head circumference
- Fussiness



Diagnosing hydrocephalus

If there is concern for hydrocephalus, the primary physician will refer the child to a pediatric neurosurgeon.

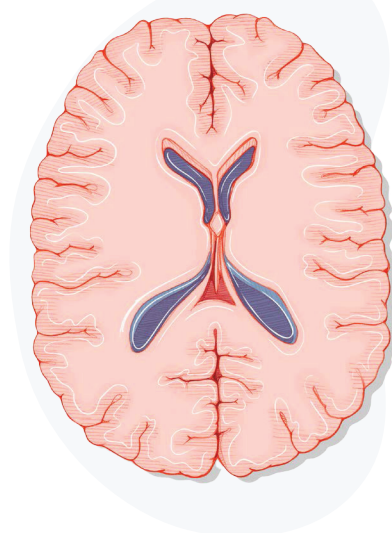
In addition to the clinical signs and symptoms, there are other tests to confirm the diagnosis of hydrocephalus.

- Radiology imaging of the brain: If hydrocephalus is present, there will be an excess of fluid seen on imaging.
 - CT scan
 - MRI
 - Ultrasounds (for infants with soft spot still open)
- Ophthalmology exam
 - Increased pressure can be seen at the back of the eye during an ophthalmology exam.

We are here

We have an experienced pediatric neurosurgery team available to serve you.

Normal Ventricles



Hydrocephalus

