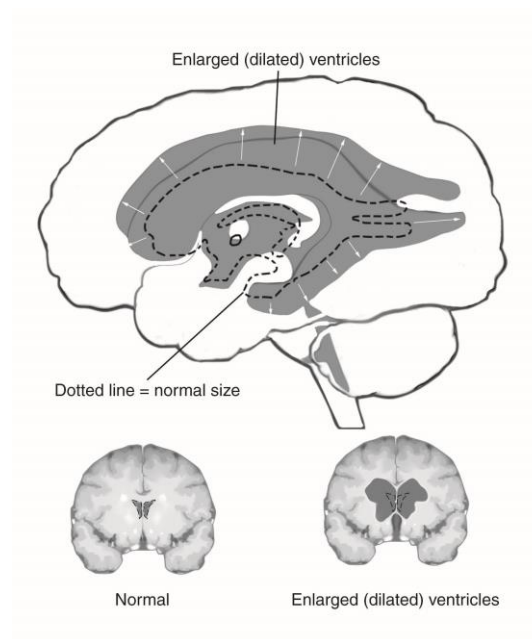


What is hydrocephalus?

Hydrocephalus is a build up of too much cerebrospinal fluid (CSF) in the brain. CSF is the normal water-like fluid that:

- Protects the brain and spinal cord from injury by providing a cushion.
- Provides nutrients.
- Carries away waste.



What causes hydrocephalus?

Hydrocephalus is either present at birth or a result of an injury, infection or tumor of the brain. It can happen if the flow of CSF is blocked or if not enough CSF is absorbed in the blood.

What are the possible symptoms?

Your child may have 1 or more of the symptoms listed.

Babies and young children

- Increased size of head
- High and tight soft spot (fontanel)
- Scalp veins you can see
- Vomiting (throwing up) or poor feeding
- Irritability
- Poor head control

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

Hydrocephalus, continued

- Eyes look downward (sundowning)
- High-pitched cry
- Sleeps more than normal
- Seizures

Older children

- Headaches when sleeping or waking up
- Headaches that improve with vomiting
- Double or blurred vision
- Thinking and memory problems
- Trouble walking
- Problems with balance
- Nausea (upset stomach) and vomiting
- Sleeps more than normal
- Seizures
- Changes in personality
- Crossed eyes or uncontrolled eye movements
- Loss of bladder control (has accidents)
- Slowing or loss of developmental growth

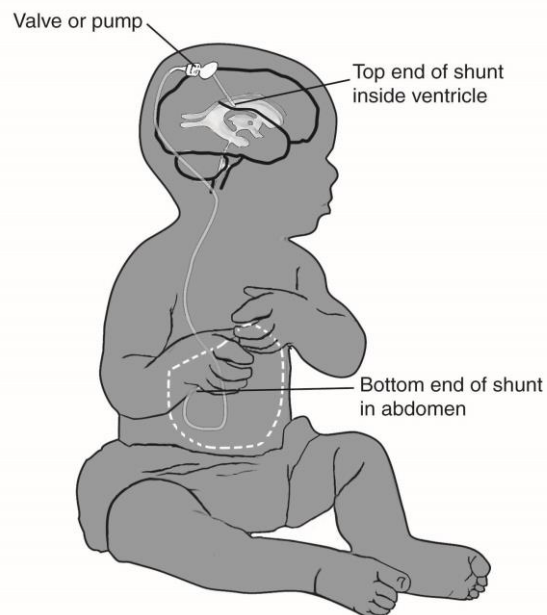
What tests could my child have?

Your child may have 1 or more of these:

- X-rays
- CT scan (computed tomography)
- MRI (magnetic resonance imaging)
- Ultrasound
- Shunt series
- Lumbar puncture (spinal tap)

What is the treatment?

- Some types of hydrocephalus get better on their own. No treatment is needed.
- Other types may need a shunt. It may be temporary or lifelong. A shunt is a thin piece of soft, flexible tubing.
 - It is placed into the ventricles of the brain during surgery.



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Hydrocephalus, continued

- A shunt can drain the extra CSF to another area of the body. This may include the area around the stomach, heart or lungs.

When should I call the doctor?

Call the doctor if your child has any of these:

- More headaches
- Headaches that improve with vomiting
- Seizures
- A change in vision, including blurry vision
- Nausea or vomiting
- Sleeping more than normal
- Breathing problems
- Feeding problems
- Fever (temperature of 100.4°F or higher)
- High-pitched cry
- Stiff neck

Also call if you have any questions or concerns about the way your child looks or feels.

This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.