Obstructive Hydrocephalus

What is obstructive hydrocephalus?
Obstructive hydrocephalus is an increase of cerebral spinal fluid (CSF) in the brain. This happens when there is a blockage of CSF flow within the brain. The blockage prevents CSF from getting to areas where it will be reabsorbed. Tumors, cysts, or birth defects can cause this blockage.

When CSF collects in the brain, the pressure in the brain rises. Increased brain pressure can damage brain tissue. Symptoms of increased brain pressure include:

- Headache
- Vomiting
- Irritability
- Decreased appetite
- Feeling sleepy
- Blurred or double vision
- Increased head size in infants
- "Sunset eyes" (eyes that only look down)
- Clumsiness in older kids and adults

Treatment
A **ventriculo-peritoneal (VP) shunt** is placed into a ventricle of the brain. The shunt is a narrow piece of tubing that drains extra CSF from the brain to the area around the stomach (called the peritoneum). The CSF is absorbed in the peritoneum.

In VP shunt surgery, we make a small hole in the skull bone. We will place shunt tubing through the hole into the ventricle in the brain. The tubing starts in the ventricle then it goes to a one-way valve under the skin. Then, we attach the tubing that goes to the peritoneum to the valve. We will also make a small incision in the stomach region where the tubing ends.

An **endoscopic third ventriculostomy (ETV)** can allow CSF to flow around the blockage to be reabsorbed. First, we will make a small hole in the skull bone. Then, we will place a small camera (endoscope) through this hole.

The camera views the parts of the brain and the blockage. We use a laser to make a small hole in the floor of the third ventricle. The CSF will go through the hole and around the blockage.

Before Surgery

- You will need a pre-surgery work up that includes a physical exam, health review, and lab tests.
- Stop aspirin and ibuprofen for two weeks before surgery. You can use acetaminophen (Tylenol®) if needed.
- Wash with Sage clothes as instructed.
- We will call you the day before surgery telling to tell you when to stop eating and drinking.
- Do not wear make-up, jewelry, or nail polish to surgery.

After Surgery
You will have some mild pain. You can use pain medicine as needed. Plan to stay in the hospital for 1-3 days. You will go home once you can eat and drink.

You will have a bandage on your head when you go home. You will need to keep this dry and clean. You will have a clinic visit in 7-10 days. Your bandage and staples will be removed at this time.

You should wait at least two weeks after surgery before getting any vaccines.

You will always need regular visits with a neurosurgeon. You will also need MRI scans to check the size of the ventricles.

When to Call
Call right away if you notice any of these signs and symptoms:

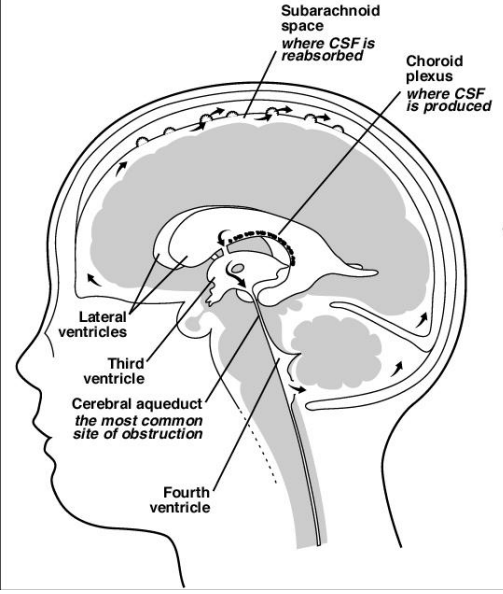
- Frequent headaches or rubbing of the head in young infants.
- Loss of appetite, nausea, or vomiting.
- Irritability
- Feeling sleepy
- Blurred vision
- Sunset eyes
- Clumsiness or balance problems
- Worsening school performance
- Drainage from a wound
- Redness, pain, swelling or drainage at the wound sites
- Sudden or slow change in personality

Who to Call
To speak with a nurse or to schedule a visit call **(608) 263-6420, option 3**

After hours, call the paging operator at **(608) 262-0486**. Ask for the neurosurgeon on call. Give your name and phone number with the area code. The doctor will call you back.

The toll-free number is **1-800-323-8942.**

Normal CSF Flow



Obstructive Hydrocephalus