

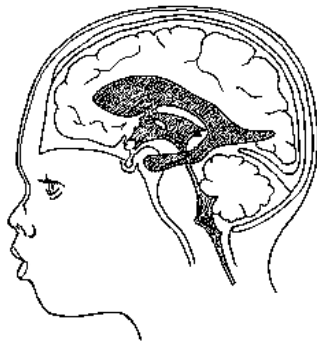
Name of Child: _____ Date: _____

Hydrocephalus

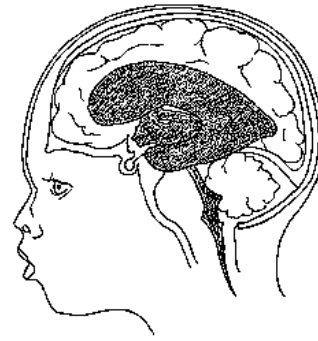
What it is:

Normally, the brain is surrounded by water, called **cerebrospinal fluid (CSF)**. It keeps the brain moist and cushions it from blows to the head. Spinal fluid is made in parts of the brain called **ventricles**. The fluid flows from the ventricles, flows over the brain, travels down the spine, and ends up in the blood. The brain makes spinal fluid all the time.

In hydrocephalus, a large amount of water (**cerebrospinal fluid**) builds up in the head. This usually happens because the spinal fluid cannot get out of the ventricles. Sometimes it happens because the spinal fluid can not get into the blood. Once in a while too much cerebrospinal fluid is made. Too much fluid can press on the brain and hurt it.



normal ventricles



large ventricles filled with fluid

Signs and symptoms

- soft spot is hard and bulges out
- scalp veins stick out
- throwing up
- cranky
- sleepy
- eating poorly
- head grows too much.

In older children signs and symptoms of hydrocephalus are: headache, upset stomach, throwing up in the morning, cranky, blurred vision, double vision, loss of interest in daily activity, and trouble paying attention.

How doctors diagnose hydrocephalus

There are several tests that can look for hydrocephalus. These tests are called scans and will not hurt your child. The doctor will decide if your child needs these tests.

- **CT Scan or CAT Scan (Computerized Axial Tomography)** An x-ray of the brain. Your child must be very still for the test. Medicine may be given to make your child sleepy for the test.

- Ask your nurse for the handout: **CT Scan #93** (Check when done.)

- **HUS (Head Ultrasound)** Takes pictures of your child's brain using sound waves. It's like the ultrasound done on moms when they are pregnant. Your child may be awake or asleep for this test. This test is only done on babies who still have a soft spot.

- **MRI (Magnetic Resonance Imaging)** Takes pictures of your child's brain using a magnet. Your child must be very still for the test. Medicine may be given to make your child sleepy for the test.

- Ask your nurse for the handout: **MRI #94** (Check when done.)

Now what?

There is no known way to prevent hydrocephalus, and there is no cure for it.

The best treatment for hydrocephalus is a **VP shunt**. The VP shunt is a flexible tube that is put into the ventricles of the brain. It carries the fluid away from the brain to another part of the child's body, where it safely goes into the blood. The fluid usually goes to space in the child's belly.

- Ask your nurse for the handout: **Shunts to Treat Hydrocephalus #123**
(Check when done.)

Children with hydrocephalus may develop slowly. They may take longer to learn to walk, run, write or throw a ball. Regular visits to the doctor are important to watch your child's development.

Children with hydrocephalus may go through puberty early. If a girl under 8 years old or a boy under 10 years old becomes sexually developed, the child should see a doctor.

Children with hydrocephalus may get vision problems. They should have their eyes checked every year. Also, children with hydrocephalus need to take antibiotics before they have their teeth cleaned and other dental work.

For more information about hydrocephalus:

Hydrocephalus Association
870 Market Street, #955
San Francisco, CA 94102
(415) 776-4713
www.hydroassoc.org

National Hydrocephalus Foundation
22427 S. River Road
Joliet, IL 60436
(815) 467-6548
www.nhfonline.org

Now that you've read this:

- Tell your child's nurse what is hydrocephalus. (Check when done.)
- Tell your child's nurse how hydrocephalus is treated. (Check when done.)



If you have any questions or concerns,
 call your child's doctor or call _____

If you want to know more about child health and illness,
visit our library at The Emily Center at Phoenix Children's Hospital
1919 East Thomas Road
Phoenix, AZ 85016
602-546-1400
www.phoenixchildrenshospital.com

Disclaimer

The information provided at this site is intended to be general information, and is provided for educational purposes only. It is not intended to take the place of examination, treatment, or consultation with a physician. Phoenix Children's Hospital urges you to contact your physician with any questions you may have about a medical condition.

Friday, December 29, 2006 • DRAFT to family review
#122 • Written by Melani Jaskowiak, BSN, RN, CNRN • Illustrated by Dennis Swain



Name of Health Care Provider: _____ Number: 122
For office use: Date returned: _____ db nb

Family Review of Handout

Health care providers: Please teach families with this handout.

Families: Please let us know what you think of this handout.

Would you say this handout is hard to read? Yes No

easy to read? Yes No

Please circle the parts of the handout that were hard to understand.

Would you say this handout is interesting to read? Yes No

Why or why not?

Would you do anything differently after reading
this handout? Yes No

If yes, what?

After reading this handout, do you have any
questions about the subject? Yes No

If yes, what?

Is there anything you don't like about the drawings?

Yes No

If yes, what?

What changes would you make in this handout to make it better or easier to understand?

Please return your review of this handout to your nurse or doctor or send it to the address below.

Fran London, MS, RN
Health Education Specialist
The Emily Center
Phoenix Children's Hospital
1919 East Thomas Road
Phoenix, AZ 85016-7710

602-546-1395

flondon@phoenixchildrens.com

Thank you for helping us!