SHUNT DEPENDENT HYDROCEPHALUS

Hydrocephalus, which is translated as "water on the brain," is an abnormal amount of cerebrospinal fluid in the brain. The increased fluid causes intracranial pressure, which can result in the symptoms listed below.

When functioning properly, cerebrospinal fluid cushions brain tissue from trauma and delivers nutrients to the brain, then exits the brain and is reabsorbed by the bloodstream. Hydrocephalus results when this equilibrium is disturbed.

VP or Ventriculoperitoneal shunts are surgically implant catheters from the ventricles of the brain to the peritoneal cavity put in place to redirect cerebrospinal fluid to prevent build up and associated symptoms.

ACTIVITY RESTRICTIONS:
From: Medical Advisory Board and Board of Directors, The Hydrocephalus Association

“All children have a need and the right to be their own person as they mature and explore their world. A child with hydrocephalus is no different. It is essential that he or she be treated like any other child and afforded every opportunity to live as normal a life as possible. The shunt is a very durable device and should pose no special problems in the course of normal physical activity or childhood bumps or falls. In general, the activities of children and adults with hydrocephalus should not be restricted. They should be encouraged to participate in regular activities, including school and afterschool physical education programs and recreational sporting activities. While some neurosurgeons are reluctant to have their patients participate in contact sports, it should be emphasized that the specifics of each patient’s situation are unique. Consultation with a neurosurgeon is strongly recommended. Together, the neurosurgeon, the patient and the family should be the ultimate decision-makers regarding specific activities for each individual with treated hydrocephalus.

INDIVIDUAL ACTIVITY RESTRICTIONS ARE RECORDED IN INDIVIDUAL CARE PLANS AND REPORTED ON HEALTH STATUS NOTIFICATIONS, AND ARE THE DECISION OF THE MANAGING NEUROLOGIST

IF STUDENT EXHIBITS:
- Persistent irritability
- Deterioration of school performance
- Change in personality
- Fever
- Headache
- Nausea/vomiting
- Stomachache
- Redness along shunt line
- Rapid jerking or movement of eyes (nystagmus)
- Sunset eyes
- Lethargy
- Unequal pupils
- Dizziness
- Change in gait
- Blurred vision

1. Stay with student
2. Call or delegate calls to
   a. Parent
   b. School Nurse
IF STUDENT DOES RECEIVE ANY BLOW TO HEAD OR NECK OR ABDOMEN:
1. If blow is significant and has caused immediate head/neck injury, do not move student, call EMS (9-1-1)
2. Report promptly to school nurse, if in building; otherwise parent.
3. Monitor student through remainder of school day for any signs listed above; if noted, immediately advise parent.
4. Do not allow student to walk or ride bus if blow to head has occurred in preceding one hour or if the student has any symptoms listed above.

IF STUDENT BECOMES UNCONSCIOUS OR HAS A SEIZURE:
1. Immediately delegate calls to:
   a. 9-1-1
   b. CPR trained staff
   c. School Nurse
   d. Parents
2. Refer to Standard Seizure Procedure
3. Always ensure incidence are documented and report is made to nurse.

If the teacher notices grades dropping over a period of time for no apparent reason, that may be an early sign of a malfunction. Subtle, unexplained changes that accumulate can begin three to six months prior to a malfunction. Some of these changes can include:

- Changes in a child’s concentration level
- The child begins to have trouble understanding concepts
- The child cannot follow more than one direction at a time
- The child struggles to pay attention
- The child may be having headaches that make him or her extremely irritable, and which may be interfering with the child’s schoolwork
- The child may have trouble focusing, particularly on the blackboard, taking tests or on reading assignments.

It is important to note that these signs and symptoms are a change in the normal behavior of the student. A perceptive teacher can be an invaluable resource to the child and his or her family.

References:
Image Source: http://www.uwhealthkids.org/pediatricneurosurgery/hydrocephalus/34387