



Shunt Care #71-8-22

Hydrocephalus (pronounced hi-dro-sef-eh-les) occurs when there is extra cerebrospinal fluid (CSF) in the brain. Normally, CSF surrounds the brain and spinal cord helping cushion them from injury, while also delivering nutrients and removing waste. Too much CSF increases the pressure on the brain and may cause damage to brain tissue and changes to brain function.

Hydrocephalus is usually treated by surgically placing a shunt near the brain or spinal cord. A shunt allows the extra CSF to flow from the brain to another part of the body.

If the shunt is not working properly, changes in CSF fluid levels take place inside the brain, causing a variety of symptoms. Watching for these symptoms in any individual with a brain shunt, regardless of how long the shunt has been in place, is very important. These symptoms may indicate a malfunctioning shunt, which if not treated promptly, can result in permanent neurological (brain) damage or death. Immediate help from the parents/nurses/physician/EMS should be sought for all suspected cases of acute shunt malfunction.

Signs of shunt problems or shunt malfunction

- Headaches
- Seizures – new onset, change in type, or increased frequency/duration of seizure activity
- Irritability
- Excessive sleepiness
- Incontinence
- Poor appetite
- Memory loss
- Poor coordination
- Impaired vision

Although shunting is successful in reducing pressure in the brain for most people, shunts do not work forever. It is difficult to predict how long shunts will last, but shunts are likely to require replacement after several years. The average lifespan of an infant's shunt is typically two years. Adults and children over the age of two may not need a shunt replacement for eight or more years.

