

Hydrocephalus

FACTS:

- Hydrocephalus occurs when the normal fluid in the brain cannot drain away into the bloodstream because the pathways are blocked. The fluid is still being made by the brain; so the build-up of fluid causes pressure to rise inside the brain, which can lead to damage.
- Hydrocephalus may occur in infancy or in older children and can be caused by a brain bleed (which may be the result of a premature birth), meningitis, cysts or brain tumors or other rare causes.
- Any child with rapid or abnormally large head growth should be seen by a doctor.
- Symptoms of hydrocephalus in infants include poor feeding, irritability, decreased activity and vomiting. Symptoms in older children include decreased mental activity, headaches (most frequently in the morning), neck pain, vomiting, (frequently in the morning), drowsiness, blurred or double vision, difficulty in walking and stunted physical and sexual growth.



Children with hydrocephalus are often chosen for adoption.



Any child with a larger head should be seen by a doctor.

Hydrocephalus

TREATMENT:

- **Medical treatment is always necessary. If an infant or child has any of the symptoms listed, they need to be seen by a doctor as soon as possible.**
- **Treatment usually includes surgery. The doctor will make a new pathway to drain off the excess fluid.**
- **Surgery normally involves placing a special tube called a shunt that redirects the extra fluid from the brain into other body cavities, such as the abdomen.**
- **Caregivers should be aware of all the signs and symptoms of increased pressure inside the brain to monitor a child post-surgery. Any child with a shunt should be watched closely for infection.**



Hydrocephalus is normally treated with surgery.



It is important to watch a child closely after surgery for infection.

Seizure Disorders

FACTS:

- The brain is made up of millions of nerve cells gathered together. By passing electrical signals to each other these nerve cells can control the body's function, senses and thoughts. Sometimes the process of exchanging signals is suddenly interrupted and a seizure occurs. If a person has more than one such seizure over a long period of time, they may have epilepsy.
- There are different types of seizures, based on the part of the brain that is involved. Some seizures present with sudden uncontrollable limb movements and unconsciousness, some present with staring and strange behavior and some are only noticed by the child that is experiencing the seizure.
- Seizures usually begin in childhood, although they can happen at any age.
- In most cases the cause is unknown. The most common known cause is a high fever. These are called "febrile seizures" and are not considered epilepsy. There are no long-term effects from these seizures, and children will usually not have any seizures when they are older. Febrile seizures do not need any treatment.
- Other known causes for seizures include infections, metabolic problems, drugs and medications, poisons, bleeding inside the brain and head injuries.



A child with multiple seizures should be seen by a doctor for treatment.



Many seizures occur when a child has a high fever.

Seizure Disorders

TREATMENT:

- All children who have a seizure for the first time, as well as children with known seizure disorders, should be evaluated by a doctor. Any child with repeated or prolonged seizures (lasting over five minutes) or trouble breathing should go to the hospital immediately.
- Most children with epilepsy are treated with medications which prevent seizures from occurring.
- Surgery may be an option for a few children who do not respond to medication.
- Most children with epilepsy have normal learning ability and intelligence. They can attend school and lead normal lives just as other children.



Epilepsy can often be treated with medication.

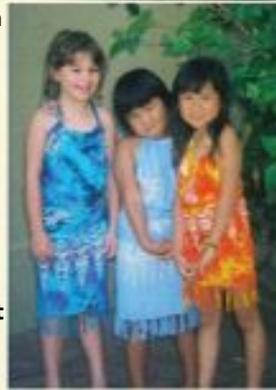


Children who have seizures can live very happy lives!

Spina Bifida

FACTS:

- Spina bifida is a very common birth defect. Many cases of spina bifida may be prevented by childbearing women taking vitamins containing folic acid before and during pregnancy.
- A child born with spina bifida has an opening in the spine as a result of the spinal column not closing completely during the first month of pregnancy. There are three types of spina bifida:
 - ⇒ **Occulta**, the mildest form, involves an opening into the vertebrae without a protrusion of the spinal cord or meninges. Many people do not know they have this. There may be a large mole or patch of hair or a deep dimple on the skin along the spine.
 - ⇒ In the **Meningocele** type, the spinal cord has developed normally, but when the child is born there is a sac protruding from a hole in the vertebrae and out of the back. It is important to have surgery early as the sac may break and infection and nerve damage may occur. Often this form of spina bifida does not present any problems once the back is closed.
 - ⇒ In **Myelomeningocele (Meningomyelocele)**, the most common form and the most serious, the protruding sac contains tissue, spinal fluid, nerves and part of the spinal cord. The spinal cord is damaged or not properly developed. There is always some degree of paralysis and loss of sensation below the damaged vertebrae. The amount of disability depends on where the spina bifida is and the amount of nerve damage involved. Many children have problems with bowel and bladder control. They may need a walker or wheelchair, depending on the level of paralysis.
- Most children born with spina bifida can live normal lives. Some children with spina bifida have problems such as curvatures in the back, hip dislocations, ankle and foot deformities and contracted muscles. Some children may have problem with bowel and bladder control. Some children may break their bones easily since their bones may be weaker than normal.
- Most children with spina bifida and/or hydrocephalus have normal intelligence.



Spina bifida occurs when there is an opening in the spine.

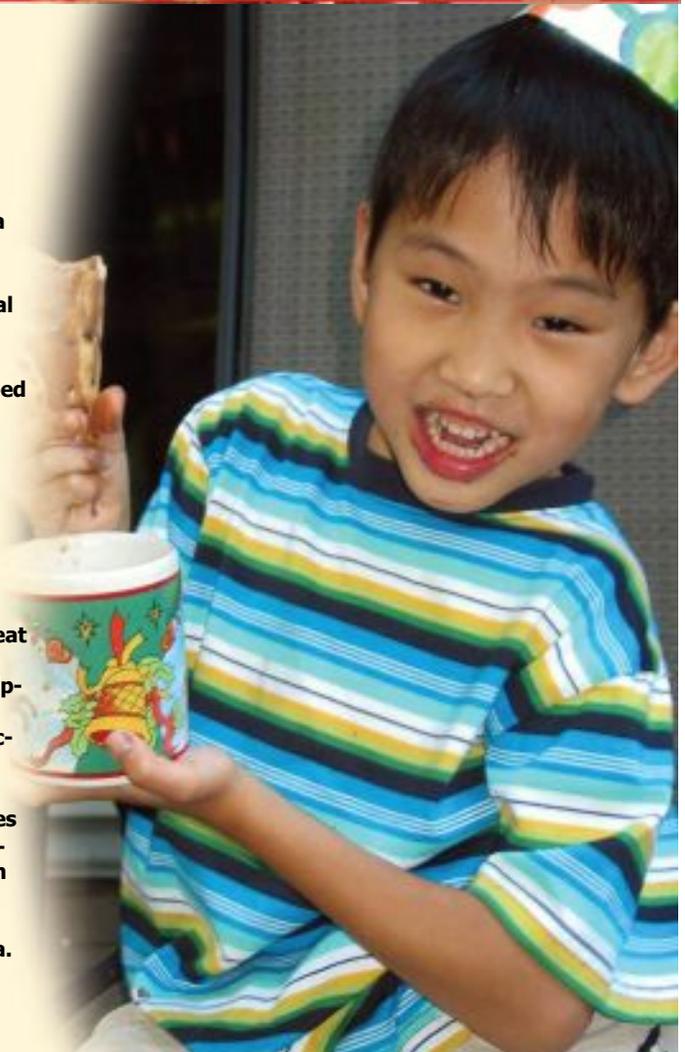


Most children with spina bifida can live normal, happy lives.

Spina Bifida

TREATMENT:

- A child with this condition should be seen immediately by a doctor.
- It is important to prevent infection and to protect the spinal cord and nerves that are exposed outside of the body.
- Babies born with a meningocele or a myelomeningocele need surgery to close the defect. Early surgery is important to prevent a loss of function due to damaged nerves.
- Placement of a shunt to drain fluid off the brain may be required for those children with the more severe form of myelomeningocele who have hydrocephalus.
- Not all babies will require surgical repair of spina bifida. Other treatment involves physical therapy to prevent or treat deformities and assist function. Positioning aids in chairs and bed, such as pillows, cushions and specially made equipment, will help the child lie, sit, or stand. Braces or splints are used to prevent deformity, promote support and protection from damage.
- Special attention needs to be given to skin care as bed sores and/or infection may occur due to the child's lack of sensation. Turning the child in bed and repositioning them when sitting every two hours will prevent bed sores caused by pressure. If reddened or white areas appear on the skin, they may be massaged to bring circulation back to the area. The skin should be kept clean and dry.
- Encourage children to assist in their care to promote independence.



**My family loves
me so much!**



**Early surgery is very
important.**