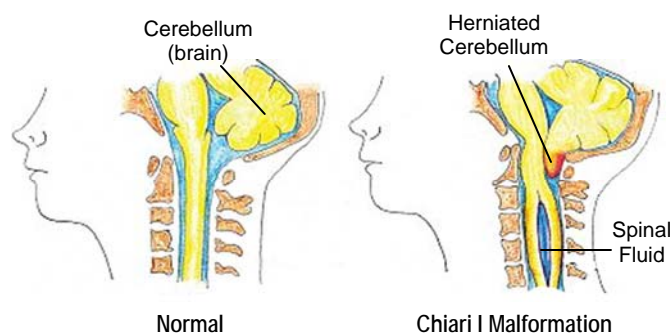


## Chiari I Malformation

### What is Chiari I Malformation?

Chiari malformation (kee-AHR-ee mal-for-MAY-shun) is the name for a condition where tissue in the brain extends into the spinal canal. This happens when the base of the skull is too small or misshapen and pushes the brain downward. Pressure from the brain tissue may cause fluid to build in the spinal cord.



The cause of the malformation is not known. Children may be born with this condition or it can develop later in childhood.

There are four types of Chiari malformation. They are defined by the amount of brain tissue that extends into the spinal canal. Chiari I malformation is the most common type and may not cause any symptoms.

### What are the signs of Chiari I Malformation?

- Headaches, usually in the back of the head
- Neck pain
- Weakness or numbness in limbs
- Visual disturbances
- Unsteady walking
- Nausea/vomiting

### How is it diagnosed?

MRI (Magnetic Resonance Imaging) shows the brain tissue (called cerebellar tonsils) extending at least 5 mm into spinal canal.

### How is this treated?

Many people with this condition never show signs or symptoms and do not need treatment.

If showing symptoms, surgery may be required. The surgery is called posterior fossa decompression. The goal of the surgery is to take pressure off the brain stem and restore normal cerebrospinal fluid flow. After surgery the patient usually stays overnight in the intensive care unit and then transfers to a medical/surgical floor. The length of hospital stay is usually 3-5 days. Neck pain and headaches are common after surgery, but should resolve over time.

### When should I call the clinic?

- Headaches worsen or become more frequent
- Develop numbness, tingling, or weakness in the arms or legs
- Changes in vision
- Clumsiness
- Irritability
- Severe nausea and vomiting

### Questions?

This sheet is not specific to your child, but provides general information. For more reading material about this and other health topics, ask your doctor. Or, visit the Family Resource Center or our Web site:

[www.childrensmn.org](http://www.childrensmn.org).