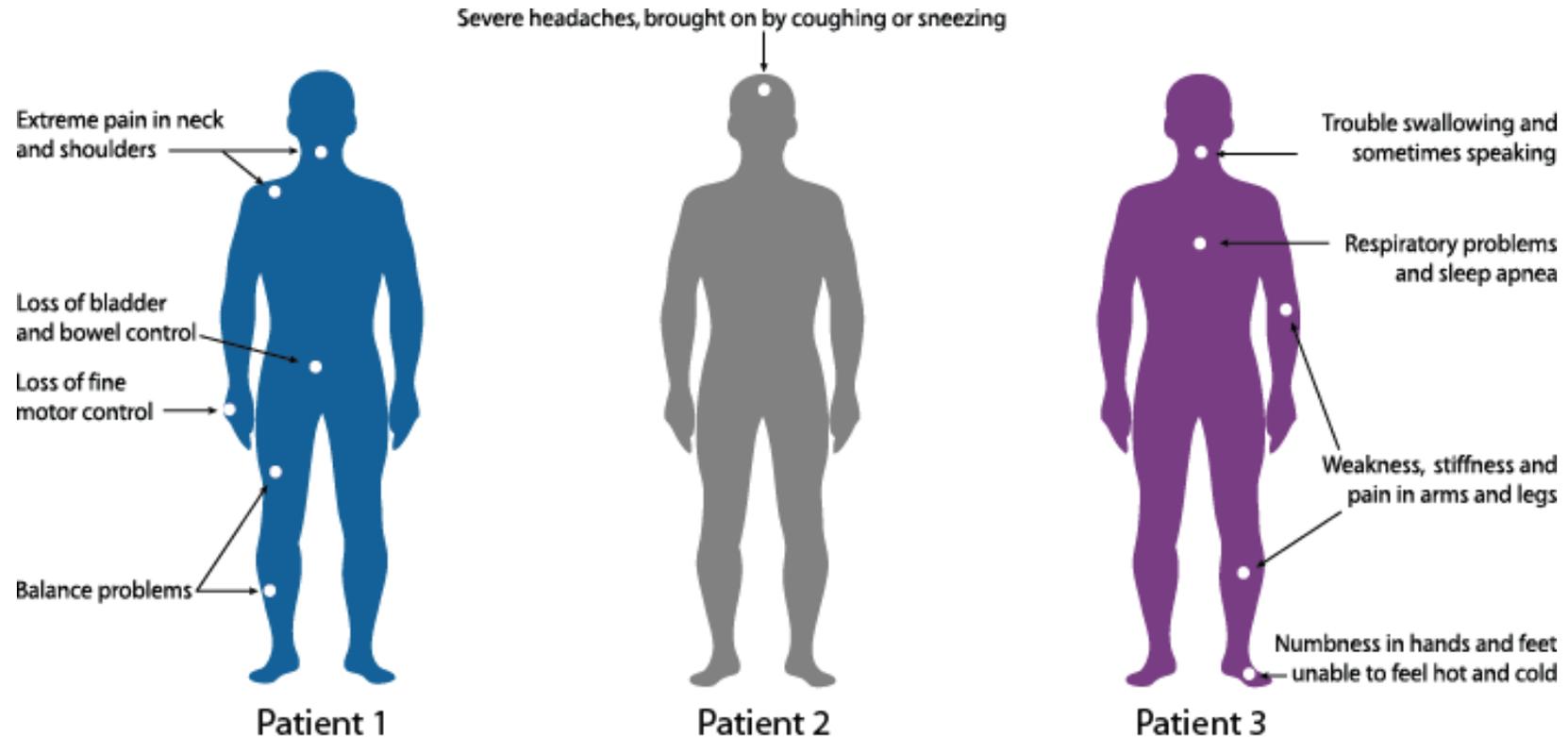


Conquering Chiari: Symptoms

Disclaimer: This presentation is intended for informational purposes only and may or may not apply to you. The creators are not doctors and are not engaged in providing medical advice. Always consult a qualified professional for medical care. Conquer Chiari does not endorse specific physicians or medical facilities.

Chiari Affects Everyone Differently



Though there are commonly occurring symptoms, the specific set of symptoms and their severity (symptomatology) varies from person to person

Common Symptoms

Symptom	Adult	Pediatric
Headache	>90%	>75%
Trouble Sleeping	>80%	>65%
Neck Pain	>80%	>50%
Balance Issues	>70%	>50%
Memory Issues	>60%	>30%

Source: Chiari1000 Project <http://chiari1000results.info/symptoms/>

- ❖ Additional commonly reported symptoms: Dizziness, Shoulder Pain, Brain Fog, Sensitivity to Noise, Ringing in the Ears
- ❖ A 2004 study found that 95% of patients reported at least 5 symptoms
- ❖ Individual symptom prevalence varies by age and gender

Common Pediatric Symptoms

Oropharyngeal issues are common in *young children*, including:

- ❖ Trouble swallowing/feeding
- ❖ Choking & gagging
- ❖ Hoarseness
- ❖ Frequent respiratory infections



- ❖ A common symptom for *older children* is **Scoliosis**: a sideways curvature of the spine

What Causes Symptoms?

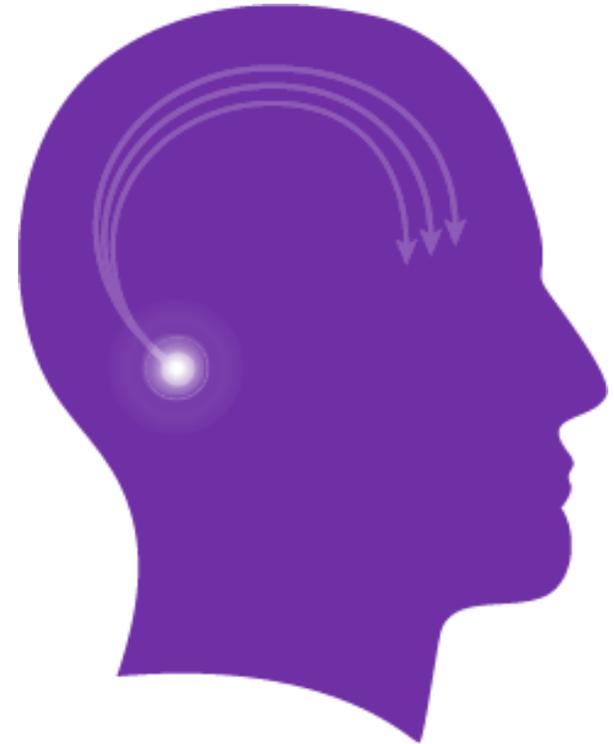
While the exact mechanism underlying many symptoms is not completely understood, Chiari likely affects a number of different structures in several different ways which leads to a diverse set of symptoms...



- ❖ It is not clear what role trauma plays in the onset of symptoms, but a significant percentage of patients identify a specific traumatic event as being the initial cause of symptoms
- ❖ Many Chiari patient also suffer from related conditions which makes the symptom picture more complicated
- ❖ Simple things like bending over, laughing, coughing and sneezing are common triggers for a “Chiari” headache.

The Chiari Headache

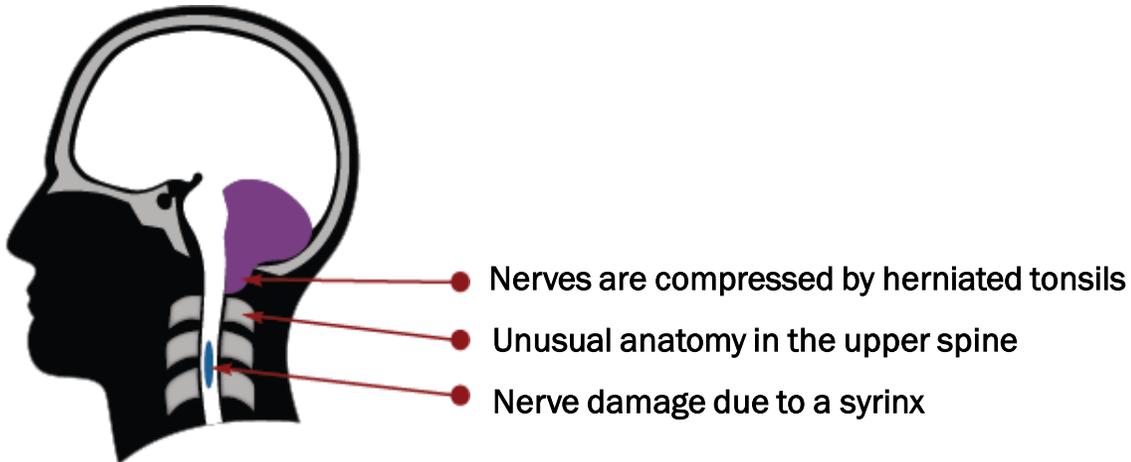
- ❖ Chiari headaches are usually described as starting in the back of the head (suboccipital) and sometimes radiating forward to behind the eyes.
- ❖ The pain is described as a feeling of intense pressure and is brought on or aggravated by straining (known as a Valsalva maneuver), coughing, sneezing, posture, singing, laughing, etc.
- ❖ Migraines are also common among Chiari patients



Headache in the back of the head is the classic Chiari symptom

Neck Shoulder & Upper Back Pain

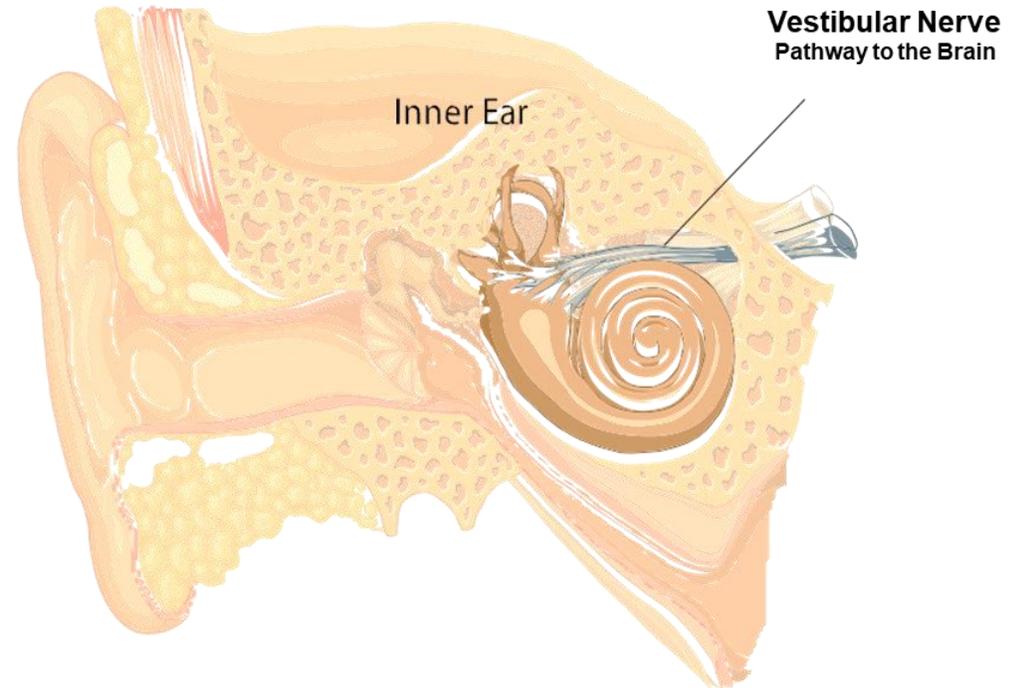
Pain in the neck, shoulder and upper back is another common symptom of Chiari due to several causes:



- ❖ Once a muscle is affected by nerve damage in the neck and shoulders, it can affect how the rest of the muscles work.
- ❖ Instead of working together to perform a task, muscles start to work against each other which in turn leads to pain and loss of function.
- ❖ For reasons that are not entirely clear, it appears that the right side of the neck and shoulder is affected more often than the left side.
- ❖ Research indicates a high rate of scoliosis among Chiari patients.

Ears & Balance Issues

- ❖ The inner ear has fluid-filled structures which send balance information to the cerebellum.
- ❖ If the cerebellum is compressed, like with Chiari, the human balance system or (vestibular system) may not work properly, which may cause tinnitus (ringing in the ears), depth perception problems, running into walls and tripping.



Sleep Apnea

AHI Apnea-Hypopnea Index (events per hour)

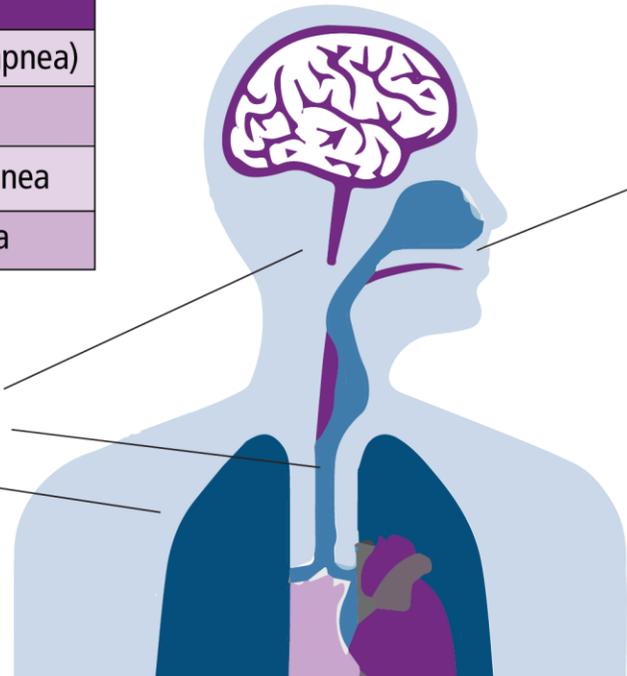
AHI	Rating
<5	Normal (no sleep apnea)
5-15	Mild Sleep Apnea
15-30	Moderate Sleep Apnea
>30	Severe Sleep Apnea

Central Sleep Apnea - type of sleep apnea where the brain stops sending the signals to breathe during sleep.

It can be caused when the brain area that controls your breathing does not function correctly during sleep.

Obstructive Sleep Apnea - type of apnea due to physical obstruction of the airway during sleep.

It can be caused by large tonsils, large tongue and soft palate. As well as a large neck size, a receding jaw and obesity.



- ❖ Chiari1000: 83% of adult women report trouble sleeping, but only 11% have been officially diagnosed with sleep apnea
- ❖ Sleep study testing has shown that apnea rates among Chiari patients could be as high as 75%

Cognitive Issues

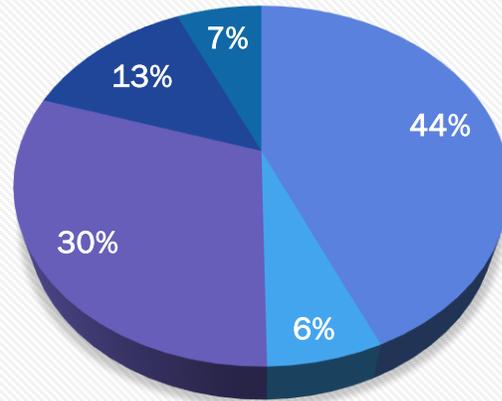
- ❖ Studies using neuropsychological testing have shown that Chiari patients perform worse than healthy controls across a number of executive function tasks
- ❖ Some of these deficits appear to be due to the chronic pain associated with Chiari, both others may be a more direct effect
- ❖ Advanced imaging studies (DTI) have shown that certain brain connections in Chiari patients may be damaged

Symptom	Female	Male
Memory Problems	>65%	>40%
Brain Fog	>65%	>35%
Trouble Finding The Right Word	>65%	>40%
Trouble Planning	>35%	>20%
Diagnosed Learning Disorder	>10%	>20%

Source: Chiari1000 Project <http://chiari1000results.info/symptoms/>

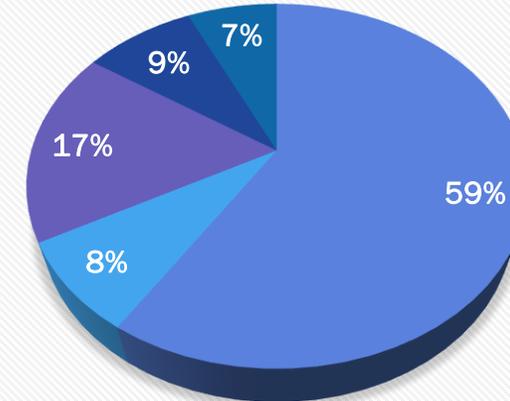
Psychological Impact

DASS Depression



■ Extremely Severe ■ Severe ■ Normal ■ Moderate ■ Mild

DASS Anxiety



■ Extremely Severe ■ Severe ■ Normal ■ Moderate ■ Mild

Source: Chiari1000 Project <http://chiari1000results.info/depression-anxiety-stress/>

Research has shown that up to 50% of adult women with Chiari are likely to meet the clinical criteria for PTSD

What Did You Say?

The medical terms for different symptoms can be confusing, below are a few of the more common ones...

Name	What it is	Name	What It Is
Allodynia	pain in response to something that should not cause pain	Malaise	a feeling of discomfort or uneasiness, "general feeling of being unwell"
Aphasia	trouble finding the right words to use when speaking	Nystagmus	rapid involuntarily eye movements
Ataxia	difficulty walking due to loss of muscle coordination	Photophobia	sensitivity to bright lights
Atrophy	wasting away of muscle	Strabismus	cross-eyed
Cephalgia	headache	Stridor	A harsh, high-pitched sound in inhalation or exhalation.
Diplopia	double vision	Syringomyelia	neurological condition where a fluid filled cyst forms in the spinal cord
Dysesthesia	unusual, unpleasant sensations	Tachycardia	rapid heart beat
Dysphagia	trouble swallowing	Tinnitus	ringing in the ears
Kyphosis	hunchback	Vertigo	dizziness

Summary

- ❖ Chiari patients suffer from a wide variety of symptoms including: headache, neck pain, cognitive issues and balance issues.
- ❖ The precise mechanism underlying many symptoms is not known, but Chiari is thought to cause compression of the cerebellum, brain stem, and cranial nerves, plus disrupt the natural flow of cerebrospinal fluid
- ❖ The hallmark Chiari symptom is a strain related headache in the back of the head
- ❖ Young children tend to suffer from oropharyngeal problems and scoliosis is common in older children
- ❖ Chiari can have a severe psychological impact and lead to depression, anxiety, and loneliness

Learn More in the [Conquer Chiari Library](#)