

# Wellness News Network

## Your Source for Health & Wellness Information

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## Cranial Bones & Chiropractic Care: A Connected Approach

### Presented by: Introduction

Your skull is a bony structure composed of two distinct parts: your cranium and your mandible (i.e., your jaw). Your cranium is made up of eight separate bones that lock together like puzzle pieces to create a protective shell for your brain. The proper alignment of your cranial bones may be important for optimal health. Even very small changes in cranial bone alignment or function may cause significant health problems, such as vertigo, notes a 2009 study published in the journal *Alternative Therapies in Health and Medicine*.<sup>1</sup>

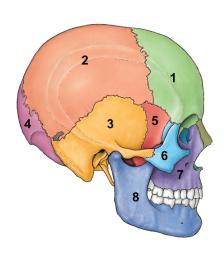
Your chiropractor is trained to care for the health of *all* your joints, including the joints that connect your cranial bones. Numerous techniques have been developed by chiropractors around the world to help treat cranial joint dysfunction. Your chiropractor can counsel you on how he or she will approach your cranial bone problem and what you can expect from this (often extremely gentle) kind of care.

# Cranial Bone Anatomy & Function

A common misconception about the cranium is that it is one solid structure. In fact, your cranium is composed of

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eight separate bones, including the following: one frontal bone, two parietal bones, two temporal bones, one occipital bone, one sphenoid bone and one ethmoid bone. The joints that connect your cranial bones are known as "suture" joints - a type of fibrous joint found only in your cranium.



Your chiropractor, using various techniques, may be able to feel a small but perceptible degree of movement in the joints that connect your cranial bones. A 2002 study published in the *Journal of Craniomandibular Practice* states that cranial bone movement can indeed be measured and documented on x-ray.<sup>2</sup> This is an important finding that helps validate the work chiropractors have done in treating cranial joint problems throughout the years.

#### **QUESTION:**

How many bones are there in the skull?

A) 7

C) 9

**ANSWER:** 

B) 8

#### TRUE OR FALSE:

The most common cause of cranium problems is sports injury

#### **ANSWER:**

False It is motor vehicle accidents

#### **QUESTION:**

How many occipital bones are there in the skull?

A) One

B) Two

C) Three

d) Four

**ANSWER:** 

A) One

Your cranial bones have several important functions, including protecting your brain from traumatic injury, protecting your organs of sight, hearing and balance, and providing a base for various muscles to attach to. Some practitioners also believe that your cranial bones play an important role in the rhythm and movement of your cerebrospinal fluid - a clear, colorless fluid that helps protect your brain from injury, among other functions.

## What Can Cause Cranial Bone Problems?

Cranial bone problems may arise for a variety of reasons. Trauma associated with falls, workplace accidents and sports are a common cause. According to a 2010 study published in the journal Craniomaxillofacial Trauma & Reconstruction, motor vehicle accidents are the leading cause of at least one type of cranial bone - temporal bone - trauma.<sup>3</sup> Some practitioners believe that cranial bone problems, including cranial joint restrictions and misaligned skull bones, may be caused by bumps experienced during childhood or even as a result of a difficult birth involving forceps, suction or vacuum extractors.

## Chiropractic Care for Cranial Bones

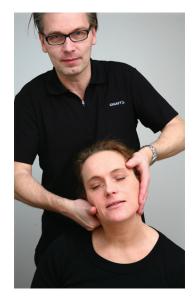
Chiropractors have long devoted significant attention to the proper movement and function of cranial bones and joints. Chiropractic care for cranial bones usually involves subtle and gentle adjustive and mobilization techniques to help remove any restrictions between these bones and restore proper joint alignment. The beneficial health effects of cranial work - as it is

most commonly performed by chiropractor - appear to be many and varied.

According to a 2007 study published in Explore: The Journal of Science and Healing, a specific type of cranial work may be a helpful adjunct therapy in the care of adults with asthma.4 Another study, published in 2009 in the journal Complementary Therapies in Clinical Practice, reports that gentle cranial work may be helpful in treating lower urinary tract symptoms and boosting quality of life in multiple sclerosis patients.5 Still another study, published in 2011 in the journal Clinical Rehabilitation, found that gentle cranial work helped significantly reduce pain in patients with fibromyalgia.6

#### **Considerations**

Every chiropractor has a unique approach to treating cranial joint dysfunction. Your chiropractor can explain in greater detail how he or she can help restore optimal function in your cranial joints. Ask your chiropractor about the beneficial health effects of cranial adjustments and mobilization to learn more.



# Quote to Inspire 1 1 1 1 1 "Erudition - dust shaken out of a book into an empty skull". Ambrose Bierce

#### **References and Sources:**

- 1. Christine DC. Temporal bone misalignment and motion asymmetry as a cause of vertigo: the craniosacral model. Alternative Therapies in Health and Medicine. 2009. Nov; 15(6): 38-42.
- 2. Oleski SL, Smith GH, Crow WT. Radiographic evidence of cranial bone mobility. **Journal of Craniomandibular Practice. 2002. Jan**; 20(1): 34-38.
- 3. Patel A, Groppo E. Management of temporal bone trauma. Craniomaxillofacial Trauma & Reconstruction. 2010. Jun; 3(2): 105-113.
- 4. Mehl-Madrona L, Kligler B, Silverman S, Lynton H, Merrell W. The impact of acupuncture and craniosacral therapy interventions on clinical outcomes in adults with asthma. Explore: The Journal of Science and Healing. 2007. Jan; 3(1): 28-36.
- 5. Raviv G, Shefi S, Nizani D, Achiron A. Effect of craniosacral therapy on lower urinary tract signs and symptoms in multiple sclerosis. Complementary Therapies in Clinical Practice. 2009. May; 15(2): 72-75.
- 6. Castro-Sanchez AM, et. al. A randomized controlled trial investigating the effects of craniosacral therapy on pain and heart rate variability in fibromyalgia patients. Clinical Rehabilitation. 2011. Jan; 25(1): 25-35.

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