

Common Causes of Upper Cervical (Neck) Misalignments

The Upper Cervical Spine

The upper cervical spine is comprised of the top two bones in the neck. These bones are designated as the atlas (C1) and axis (C2). Since these bones protect the brainstem, facilitate blood flow to the brain, and allow for suitable cerebrospinal fluid drainage, their proper alignment is very important. A neck misalignment can lead to all sort of chronic health conditions such as migraines, fibromyalgia, asthma, MS, TMJ dysfunction, and more.

Why Misalignments Are Common

You may wonder why misalignments of the C1 and C2 vertebrae are so common. This is because they are unique in their design and function. For example, the C1 (top bone in the neck) is responsible for about half of your mobility when it comes to looking up or down. Similarly, the C2 provides about half of your range of motion when it comes to looking from side to side. Thus, the unique shape of these bones is the basis for approximately half of the motion of your head despite being only 2 of the 7 bones in the neck. Because the bones move freely to facilitate motion, they are also subject to misalign easily.

What Causes Upper Cervical Misalignments?

Now that you understand why upper cervical misalignments can occur, you may wonder if you are at risk. We're going to consider some of the most common underlying factors regarding upper cervical misalignments. If you have experienced any of these circumstances, or if you are undergoing symptoms of an upper cervical misalignment, it is important to have the C1 and C2 bones examined by an upper cervical chiropractor. With that in mind,

here are some of the most notable ways the upper cervical spine becomes misaligned.

- Trauma

Trauma that affects the upper cervical spine can come in many different forms because these bones are located right at the base of the skull. Thus, injury to the neck and/or the head can be responsible for misalignments. Here are some specific forms of trauma that commonly lead to atlas and axis misalignments.

- Car Accidents

Car accidents often involve the head being thrown forward and then backward (or vice versa) leading to an atlas misalignment. Such an accident can result in whiplash, even in accidents as slow as 5 mph. Many of these injuries go undiagnosed, and even when whiplash is diagnosed, it is commonly dismissed as being healed after swelling goes down and range of motion returns. However, if a misalignment occurred, more care is needed than ice, bed rest, and time. In other car accidents, hyperextension occurs from side to side, and this can cause an axis misalignment.

Sports Related Injuries

Contact sports frequently result in concussions. Since the atlas balances the head, any type of head injury has a high probability of misaligning the upper cervical spine. Besides contact sports, additional sports that regularly lead to injury and misalignments include horseback riding, skiing, board sports, and the like.



The head weighs 10-12 pounds, and this weight balances on the atlas.

Think about trying to balance a bowling ball on top of a broom stick.



birth canal, sometimes assisted by forceps or a vacuum, or even a C-section birth can damage the upper cervical spine. Further injuries include everyday slip and falls. Children fall down thousands of times during their childhood while learning to walk.

- Posture

Proper posture is vital to upper cervical alignment. The head weighs 10-12 pounds, and this weight balances on the atlas. Think about trying

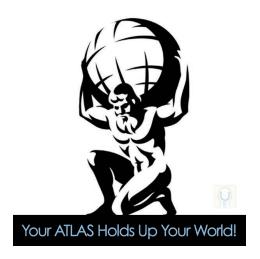
to balance a bowling ball on top of a broom stick. If you lean your neck forward while sitting at a desk all day or while using a mobile device, for example – the amount of pressure on the vertebrae increases and could cause tremendous strain on your neck. A 60-degree angle of forward head position increases the strain on the neck to 60 pounds. You can imagine how doing this for long periods of time or repeatedly throughout the day could lead to a misalignment. Therefore, proper posture is vital.

- Stress & Toxins

Stress leads to a tightening of the muscles in the neck. You may even begin to rub your neck and shoulders without thinking about it. Some people go as far as to try and "pop" their own neck to relieve the pressure. All of these activities, from dwelling on stressful thoughts to attempting self-adjustments of the neck can cause misalignments of the C1 and C2. Toxins can also cause a neck misalignment. Unfortunately in our society, these are hard to avoid. The polluted air we breathe, the altered food we eat, and the drugs we ingest may all contribute to toxicity within our body.

Upper Cervical Chiropractic Care

If you have suffered from head or neck trauma, use poor posture, been weighed down by stress or ingested potentially dangerous toxins, you may be at risk for an upper cervical misalignment. An upper cervical chiropractor can determine if you have a neck misalignment and correct it to restore brain to body communication. Contact an upper cervical chiropractor to see if you have a misalignment in one of the top two bones of your neck that may be preventing you from living life to the fullest. It's a safe, effective and natural form of health care.





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