

# HEADACHES OF MECHANICAL ORIGIN



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According to The McKenzie Institute, disorders of the upper portion of the neck (upper cervical spine) can cause headache pain. Mechanical headache pain is suspected when changes in position or repeated movements of the cervical spine affect headache symptoms. Cervical headaches can resemble migraines and the symptoms are usually intermittent. These headaches are almost always affected by positioning but not always by movement.

Symptoms of cervical headaches will typically arise due to static deformation of tissues at the end of available range of motion within segments of the neck. An analogy often used is the bent finger example. If you apply and hold end range pressure to your index finger as you extend it backwards, you will begin to feel discomfort. This is similar to the deformation that occurs in the neck that can cause headache pain.

Mechanical headache pain radiating from the neck frequently is felt locally at the back of the skull (occipital region) and can also be referred to the side (temporal region) or front (frontal region) of the skull. Cervical headaches are often asymmetrical. That is, symptoms are frequently found on one side or the other.

Very often patients who complain of headache pain of mechanical origin will say that sitting for prolonged periods of time (especially driving and working at a desk) will consistently irritate their headache symptoms. By and large most of the people fitting into this category demonstrate poor postural habits and create end range stress to the upper portion of the neck. Headaches of this kind are sub classified as **postural headaches**. Postural headache symptoms are typically localized to the occipital region. In cases such as this, postural correction is essential to recovery.

Headaches sub classified as **dysfunctions** occur due to premature end

range stress on adaptively shortened soft tissue.

A useful analogy for headaches of this type is the bent elbow example. If someone was to have their elbow cast in a bent position after an injury they will not be able to fully straighten their elbow upon having their cast removed. Pain is experienced at the end of their available ROM as they attempt to straighten the elbow. This is because tissues at the elbow have adaptively shortened as they remodeled during healing and will not allow the elbow to fully straighten. It will take regular stretching to help regain flexibility to the involved tissue. A similar injury can occur at the upper cervical spine, causing tissue to heal in a shortened position. In a case like this, a trained therapist will determine what the dysfunction is and prescribe the appropriate positioning and repeated movement exercises to stretch the shortened tissue.

Another mechanical headache sub classification is **derangement**. When referring to the upper cervical spine, this means that there is anatomical disruption or displacement of structures within and around the disc sitting between the 2<sup>nd</sup> and 3<sup>rd</sup> cervical vertebrae. The structures under increased mechanical deformation will respond by producing pain. Again, an appropriately trained therapist will work to identify the particular derangement and customize a rehabilitation program designed to reduce and eliminate the derangement.

If you suspect that you are suffering from headaches of mechanical origin you may want to consult a certified McKenzie therapist trained in mechanical diagnosis and treatment of the spine. Walter “Chip” Larson, clinic director at Capital Physical Therapy in Concord, is a certified McKenzie therapist. Call today to set up an appointment with Mr. Larson.

**\*\*Information contained in this newsletter is based on teachings of the McKenzie Institute. To learn more, visit them on the web: [www.McKenzieMDT.org](http://www.McKenzieMDT.org)\*\***

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