Dynamic Chiropractic

HEADACHES & MIGRAINES

Headaches: Role of the Upper and Lower Cervicals

Joseph D. Kurnik, DC

A functional relationship has been observed between the upper and lower cervical region, as evaluated by motion palpation in the supine position. Upper cervical fixations (hypomobile spinal joints) are often found as reactions to lower cervical dysfunction and pathology, such as degenerative joint disease (DJD) or disc protrusion. It has been observed that such upper cervical dysfunction may be eliminated or reduced through traction of the lower cervical dysfunctional segments and/or the occiput in the supine position.

The most common upper cervical findings in reaction to lower cervical pathology involve motion blockades (hypomobile functioning) at C1/C2, C2/C3 and sometimes at the occiput/C1 levels. At the C1/C2 and C2/C3 levels, the most common observations are left-side coupled restrictions in combined flexion, rotation and lateral flexion, or some combination of these tested motions. The most common right-side findings are anterior-to-posterior restrictions and extension at the C2/C3 level.

The reaction of the upper cervical levels can result in headaches secondary to irritation to the greater occipital nerve. The headaches can be right- or left-sided, or they may involve both sides of the head and face. If these upper cervical levels are adjusted, there can be relief or elimination of the headaches (or even vertigo), but since the upper fixations are reactive, the patterns return.

If you observe patients with middle to lower cervical disc pathology involving posterior disc bulging, protrusion or herniation, notice the tendency to flex the neck forward. This appears to be an attempt to reduce the stenosis created by disc pathology. DJD involving thinning of the disc with the development of stenosis in the middle to lower cervical spine may result in the same tendency to flex the cervical spine forward.

The reaction to this (DJD and disc pathology) can be the extension posteriorly of the upper cervical spine in order to keep the eyes level and looking forward. To do this requires increased contraction of the posterior cervical musculature, constricting the upper cervical spinal articulations. Traction at the level of pathology and at the occiput helps to reverse this process and release the lower and upper cervical restrictions in movement.

If the lower cervical spine is tractioned in the supine position by hand or towel, with the contact at the level of pathology, then it can be followed by re-examination of the upper cervical mechanics. Most often, there will be a lessening of the upper cervical mechanical blocks or dysfunction. Sometimes, however, in serious cases, the headache will worsen if the head is allowed to extend while engaging in lower cervical traction, so caution should be used to prevent head extension.

The response to lower cervical traction can be mild, moderate or significant in creating release to the upper cervical motion blockages. When headaches are involved, supine traction with bilateral hand contact to the occiput and head also helps to release the upper cervical blockages, but also to directly decompress the greater occipital nerve by causing distraction at the occiput/C1 and C1/C2 levels. Occipital traction also can be used in the absence of headaches to release or reduce upper

cervical mechanical blockage.

An important point to bear in mind is that in the presence of lower cervical disc pathology, upper cervical adjusting may appear to be appropriate, but in many of these reactions, the upper cervical mechanical blockages may be cleared or reduced with appropriate gentle traction. In an undetermined percentage of cases, mild adjusting may be required, but rough adjusting could definitely create upper cervical reactivity, instability and irritate the lower cervical pathology.

JANUARY 2010