

The Seeking Phenomenon and Headache

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The seeking phenomenon is what has been hypothetically established as an observed spinal patterning.¹ In the case of headaches, I am referring to the upper cervical spine. The example I wish to emphasize involves the articulations at occiput/C-1, C-1/C-2, and C-2/C-3.

In the case of C-1/C-2, observations are made through the practices of static and motion analysis with digital palpation in the supine position. With static palpation, C-1 is palpated from posterior to anterior and from anterior to posterior (bilaterally). C-1 is observed with the left TP slightly to significantly more posterior than the right side. Likewise, the right C-1 TP palpates as being more anterior than the left side. One can palpate the TPs from the anterior by pushing through the SCMs, and easily from the posterior through the paraspinal muscles. Both anterior and posterior palpation should be practiced.

This C-1 patterning is observed in the vast majority of cases. The C-2/C-3 articulation is similarly analyzed. The C-2 position upon C-3, using static palpation (palpating bilaterally A to P and P to A), shows C-2 to occupy the same static position as C-1 in the majority of cases but not as thoroughly dominant as C-1 in its mechanical tendency to seek left posterior and right anterior positions. C-2 usually shows right anterior seeking with A to P restriction as tested with supine motion palpation. C-2 commonly demonstrates right lateral to medial restriction when tested. Occasionally, C-2 changes this patterning and palpates as right "posterior," showing restriction with palpation on the right with rotation from right to left.

When palpating with motion analysis, one palpates A to P and P to A bilaterally. Additionally, one palpates lateral to medial (bilaterally) to evaluate lateral flexion dysfunction. For C-1 and C-2, posterior palpation contact points are upon the posterior TP and arch regions.

Anterior contact points are upon the anterior TP regions. With few exceptions, when analyzing C-1 for rotation one finds left-sided rotation restriction in rotating to the right, with a C-1 left posterior TP contact. With a right-sided posterior C-1 TP contact, one invariably finds that C-1 rotation to the left to be unrestricted. Another way of putting it is that there is a tendency of hypomobile dysfunction of C-1 in rotation to the right. There is a tendency of hypermobile dysfunction in C-1 rotation to the left. When examining for left lateral flexion, C-1 lateral bending upon C-2 is either overtly hypomobile in function, or it shows an increased resistance relative to the right side. Contrary to this, the right C-1/C-2 articulation shows increased movement, or hypermobile dysfunction (or a tendency thereof) in relation to the left side. When examining C-2 upon C-3, the same situation is most often found, where C-2 rotation right is restricted, and C-2 rotation left is less restricted and more than its rotation to the right. Lateral bending of C-2 commonly is restricted on the right, especially when associated with right-sided neck pain or headaches. In a smaller percentage of cases, C-2 rotation from right to left is most restricted and rotation left to right is less restricted or normal.

The overall impression, conclusion, or observation of these mechanical processes relative to

examination in the supine position, is that C-1 seeks the posterior direction on the left side and the anterior direction on the right side. With almost equal frequency, C-2 does the same thing. Accordingly, C-1 seeks right lateral bending and is restrictive in left-lateral bending. C-2 upon C-3 follows the same pattern, with regard to rotation, with exceptions. Naturally, exceptions do exist, but I am making reference to what is most commonly encountered with supine motion analysis. In accordance with what we were presented in school, a simple description would be that C-1 and C-2 more often are left posterior and right anterior. I have referred to these mechanical tendencies as the seeking phenomenon. It exists also in many other regions, such as the sacroiliac joints and lower lumbar spine.²

A little story seems appropriate at this time. When I was an intern in school, Dr. Bertrand Faucet (an instructor from France) told me of a DC in France who adjusted everyone at C-2/C-3 in the same position using recoil style. He used the same adjustment for everyone, yet he had great results. I thought it was ridiculous and succumbed to designating everyone as the same, without individuality. Yet, ultimately, I ended up doing the same thing. Ninety-nine percent of the time, I adjust C-1 as restricted right rotation and left-lateral bending. I adjust occiput and C-2 as right-lateral bending restrictions. I adjust L-5 as LP listings and the right ilium as an AS listing. This is the result of the seeking phenomenon. I accept this concept as a reality, as I do other constants in nature, simply because I witness these patterns daily with a variety of palpation procedures and positions.

I use supine cervical analysis and believe it to be more accurate than seated cervical motion palpation, and it is easier to perform. The patient's neck is relaxed in this position, and you can feel the relationship of one segment to the one immediately below it. There is minimal postural compensation, adaptation, or postural muscle tension (tonus) to deal with when palpating. With seated palpation, one has to deal with distorting forces, such as spinal muscle increased tension and postural compensations.

In relation to headaches, I have found from a structural approach that it is best to divide them into three categories: left sided, right sided, or generalized. I do not exclude other factors as headache contributors, such as hormones, tension, blood sugar, TMJ problems, food allergies, colon and digestive problems, and so on. However, the structural foundation seems to set the stage or create an environment for the expression of many headaches.

I am not opposed to medication, food alterations, therapy or dietary supplements. Many approaches to eliminating headaches are available and are needed, not just one approach, whether chiropractic, medical, nutritional or psychological.

There is an association of these three categories with the seeking phenomenon, or spinal mechanical tendencies of the upper cervical spine. Left-sided headaches are associated with C-1 "posterior" fixed-left listings. That is, C-1 on the left side resists motion and rotation to the right. Also, C-1 on the left resists lateral flexion, whereas C-1 on the right laterally flexes normally or is hyper-normal in rotation to the left.

Right-sided headaches are associated with the C-1 right anterior fixation dysfunction (restriction of motion A to P) and with C-2 and occiput dysfunctions. In relation to C-1 anterior fixations, there are reactions. The reactions are in the form of right occiput and right C-2 dysfunction fixations. The right-sided occiput often compensates to the C-1 right anterior fixation by assuming a right posterior position. It may become fixated in this right posterior position. It usually compensates also by fixing

in a right lateral position. This means that the occiput on the right side may fixate right posterior and superior. It may resist left rotation and right lateral to medial motion. Also associated with right-sided headaches are C-2 mechanics. C-2 tends to assume dysfunctional patterns, such as right-lateral flexion restriction, primarily. This C-2 pattern tends to be more true when accompanying right-sided neck or head symptoms. C-2 rotation restriction to the right must be evaluated also, requiring a left sided C-2 contact.

In treating these mechanical problems, I usually adjust C-1 from the left side. With left-sided headaches, the left sided C-1 contact is usually the main adjustment. For right-sided headaches, the following are possible corrections:

1. C-1, correcting left posterior and right anterior fixations, using a simultaneous bilateral contact;
2. occiput, correcting right posterior and lateral flexion fixations, after or before C-1 correction;
3. correcting a right posterior and lateral occiput fixation, without a C-1 fixation being present;
4. correcting C-2 for lateral flexion fixation on the right side, usually seen with right-sided symptoms;
5. correcting right occiput and C-2 fixations after C-1 correction or with no C-1 involvement;
6. correcting a C-2 rotation dysfunction on the right side, from posterior to anterior, rotating right to left. This is infrequent. This may be the only upper cervical fixation, or a left sided C-1 fixation may be present.

In other words, for right-sided head pain and associated neck pain, a proper C-1 adjustment from the left side may correct a right-sided headache if the technique is proper. This requires a bilateral contact, or you may have to follow up with an occiput or C-2 adjustment for rotation and/or lateral bending with a contact on the right side. Or, there may be no C-1 primary problem, and you have to correct the fixation on the right side at the occiput and/or C-2 levels. Do not adjust C-1 on the right side with a right-sided contact. This will drive C-1 even further into the anterior headache region. It also is a danger to the vertebral arteries.² Adjusting C-1 on the right side definitely is dangerous because it jams the C-1/C-2 facet joints and over-stretches the vertebral arteries. Adjusting C-2 for rotation from right to left with a contact on the right side also can be dangerous in the majority of cases for the same reasons. Both C-1 and C-2 tend to seek the anterior position on the right side. However, C-2 occasionally presents with right-sided rotation and lateral flexion restriction, allowing C-2 to be adjusted safely in rotation from right to left. Most rotation adjusting of C-2 with supine analysis is with a left sided C-2 contact, rotating left to right.

References

1. Kurnik JD. *The Connection*. 1997, distributed by *Dynamic Chiropractic*.

2. Kurnik JD. For safety's sake, if you adjust C1. *DC*, July 26, 1999.

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