Unwinding Atlas and Axis – Participant Handout

PREREQUISITES: 1) MELTING THE ATLAS AND AXIS, 2) READING THE HANDOUT YOU RECEIVED IN MELTING THE ATLAS AND AXIS. The document below assumes you have already studied the handout you received in Melting the Atlas and Axis.

Unwinding Muscles Series is based on the observation that muscles slowly contract and relax in a similar (or perhaps the same) process as cranial motion.

Applied to the atlanto-axial joint and occipito-atlantal joint, when we feel the head wanting to rotate, sidebend, flex or extend at these joints, we do the same as the craniosacral therapists: we help the head go the way it wants. Then comes the difference: we stop to think, which muscles are in their shortened position? We palpate the short muscle, press into it, and melt the muscle. Then coincidentally we feel the head wanting to come back to neutral. By relaxing the muscles, the unwinding process is likely quicker and the results last longer.

Since you felt the muscle melt, you are certain that her brain decided to reduce the contraction. You can feel confident then, that the head will be less likely to want to rotate in that direction in the future. The brain changed its mind, and you were a witness.

Your confidence is translated into the other person, nonverbally, and if you choose, also verbally when you say aloud, I felt the muscles melt. I felt your head wanting to return to neutral.

When you ask, Did you feel your muscles melt? Did you feel your head want to return to neutral, she gains conscious awareness of her subconscious muscle contractions, even if her answer is, no. If her answer is, yes, then she gains confidence that she is finally resolving this issue.

Course Description:
For those who have studied the motion of the atlanto-axial joint and actions of the obliquus Capitis inferior muscle, this course covers assessing and treatment using the aid of cranial muscle motion. This slow motion contraction of muscle shows you which way the joint is imbalanced by guiding you into the safest, most comfortable treatment positions. So guided, you may discern which muscle is most shortened and add muscle work to your slow motions. When you've learned how to "listen," cranial muscle motion will also "tell" you when the guarding begins to release, when the contraction is less than antagonist contractions (because the head will begin to move back toward neutral), the satellite contractions of antagonists, and give you an accurate foretelling of how much more treatment, if any, is necessary for a full resolution. Prerequisite: "Melting the Atlas and Axis," and "Actions of the OCI muscle," or "Three Muscles Rotate The Head."

Learning Goals:

- Hands-on experience feeling cranial muscle motion acting to rotate the head
- Ability to assess whether L or R OCI muscle is contracting more, using cranial muscle motion

Aims:

1. Assessment which way the head "wants" to rotate
    a. This is a mechanical technique not intuitive not energy.. Recognize the head can only "show" what it wants while it is being supported with solid contact—if the hand strays from bone, no longer are you sensing actual motion.
2. Resolution--knowing when/if the head "wants" to return toward neutral, how far, and how fast

3. Qualities:
    a. Patient
    b. Nonjudgmental
    c. Process over Performance
    d. It would be more healing for her brain, for us to leave her head unreturned, than to hurry a forced resolution.
    e. Unforced teaches the brain that we value its choices
        i. sometimes the brain is actually testing us to see if we will hurry, or judge
4. (Kinesiology) Memorizing which muscles must be contracting more, when the head "wants" to go into six actions;
    a. Three motions: SB, F/E, Rot
    b. Combinations of 2 motions
    c. Combinations of all 3 motions
5. Experiencing what it feels like to receive
6. Ability to do muscle work at the same time feeling cranial motion..
    a. Ability to use pounds of force while sensing ounces of motion
    b. Experience muscles melting, at the same time that motion is changing
    c. Form a working opinion on this statement; *changes in muscle contraction account for (or at least coincide with) changes in motion*
7. Experience improvising hand positions, to melt a muscle at the same time as supporting motion
8. Able to describe how muscles are unwound:
    a. Sense which way the head wants to go
    b. With Right Brain, help the head go the way it wants, until it stops or stays away from neutral
    c. With Left Brain, think what muscle must be short
    d. Reach

How Many Ways Can The Head Move Away From Neutral?

If you choose to read this section, please read it all the way through. If you stop in the middle you may freak out at the mind-boggling complexity, and this would delay your learning. The conclusion is that this is really simpler than you think.

So how many ways? Your first thought is three: it can sidebend, flex/extend, or rotate.

But wait: it can sidebend left OR right. It can rotate left OR right. It can flex OR extend. That makes six.

But wait: it can sidebend left OR right at the OA joint OR the lower cervicals, that's four possibilities just for sidebending.

It can rotate left OR right at the AA joint OR the lower cervicals. that's four possibilities just for rotation.

it can flex OR extend at the OA joint OR in the lower cervicals, that's four possibilities just for Flex/Extend.

Here are the possible motions so far:
USB:L
USB:R
URot:L
URot:R
UFlx
UExt
LSB:L
LSB:R

LRot:L
LRot:R
LFlx
LExt.

These are single motions. Now consider that each of these can be combined with the others. For example, we know that when the Left SCM contracts, it causes both LRotR and LSBL. This is a combination of two motions.

Did you know the SCM is neutral with respect to flexion and extension of the upper cervicals? Do this right now: pull your head rearward while nodding your head downard. What you've just done is extend your neck while flexing your head. While holding yourself in this position, squeeze one of your SCM. Is it tight? No, it's loose. This proves the SCM is not a head flexor. However, when lying on your back under a car, when you need to lift your head off the floor to see behind something, your SCM engage. The SCM pull the entire head forward, but when the head is lifted from the floor you don't automatically tip the head up or down. If anything, the chin comes further off the floor than the forehead does, proving the SCM is not a head flexor. The SCM is a neck flexor, but is neutral with respect to head flexion/extension.

Our previous notation is no longer complete. From the example of the SCM, we see that each neck muscle has effects in each of three actions, and in each action it can go two directions or it can be neutral.

Here is a chart showing what I just said:

Upper Rot	Upper SB	Upper F/E	Lower Rot	Lower SB	Lower F/E
L	L	F	L	L	F
R	R	E	R	R	E
Neut	Neut	Neut	Neut	Neut	Neut

As before, the R SCM muscle would cause both LRot:R and LSB:L, but consider its effects also on the upper cervicals: URot:R, USB:L, and its effects with respect to flexion and extension: UF/E:Neut, LF/E:Flx. Each muscle has an effect (or neutral) in six dimensions.

The number of possible combinations of head movements is $3^6 = 3 \times 3 \times 3 \times 3 \times 3 \times 3 = 729$ possible actions of the head. Wow, it's mind-boggling, isn't it?

How can you monitor all of this? It is simple. Your brain already knows all this math. Your brain uses this math daily when you move your own head. When you want to cock an ear, raise an eyebrow, nod to a new person, chide a child, nod yes tentatively or certainly, shake your head no as in not a chance or maybe not, look over your shoulder at oncoming traffic while leaning forward on a ninja motorcycle or while leaning back in a corvette, your brain calculates which muscles to contract to make that motion possible. If there is a part of your brain that calculate which muscle for yourself, why couldn't you access that information when working on someone else?

But you don't need to do this consciously. I only add this part of the handout so that you can be amazed what brilliance your brain gives to your hands. Your hands become the helpers to the other brain's control of its muscles. Your hands communicate with your own brain to assist, and resolve the muscle tension with many of these calculations per second. The other person's brain notices that your hands are this aware, and then it places its head in your hands, trusting that you can assist. Perhaps the two brains collaborate during this time and come up with a solution, as two heads are always better than one.