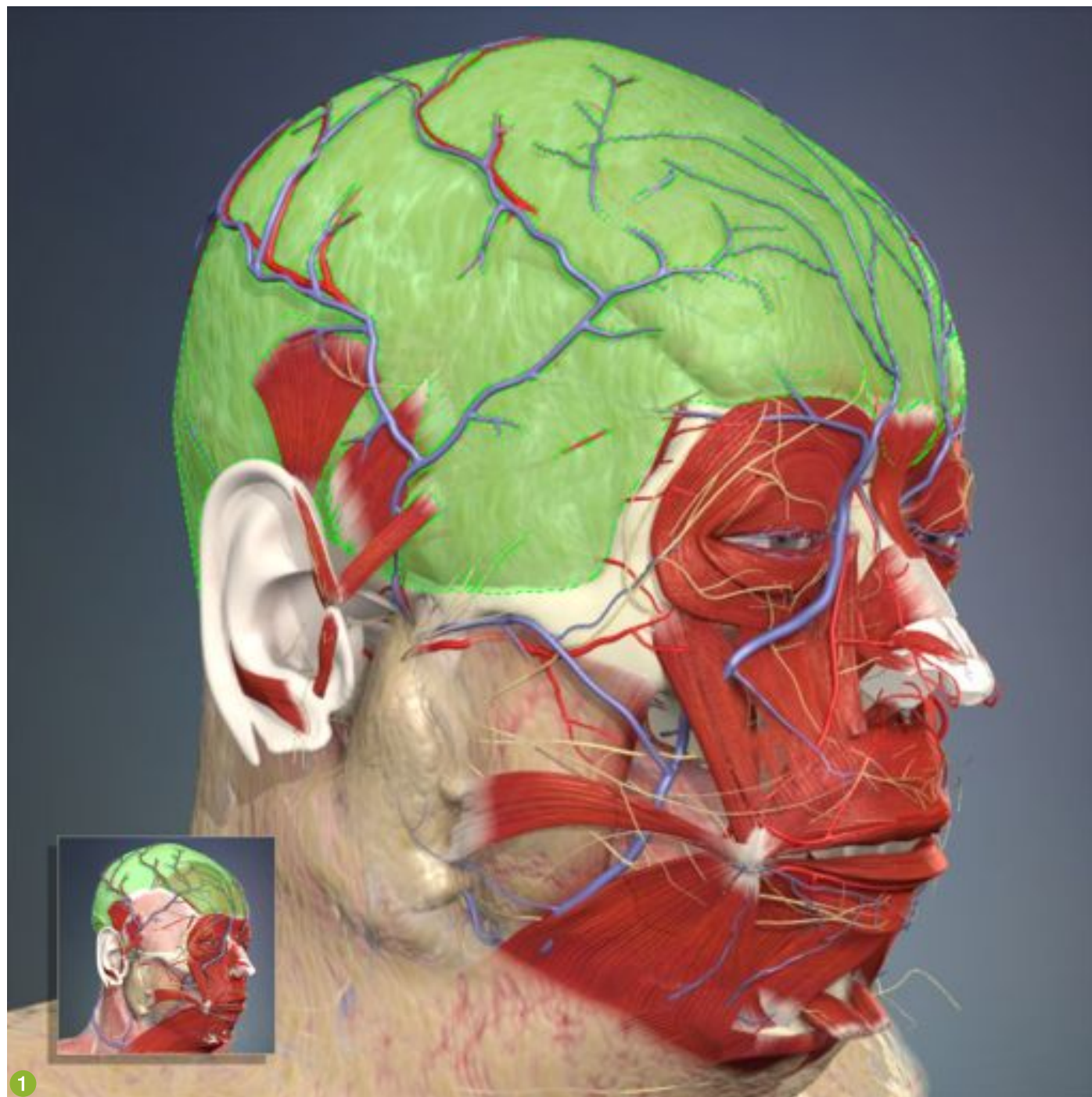


myofascial techniques

BY TIL LUCHAU



1 The superficial fascia of the cranium is a tough fibro-adipose layer just under the skin. Inset: the galea aponeurosis is deep to the superficial fascia and is continuous with the frontalis and occipitalis muscles. These layers play a role in many tension and musculoskeletal headaches through direct fascial tension and referred pain. *Images courtesy of Primal Pictures. Used with permission.*

WORKING WITH HEADACHES, PART I

Musculoskeletal Headaches

Take a guess: how many kinds of headaches are there? With Google and a few minutes, you can compile a list of hundreds of distinct types of headaches.

These include, but are not limited to: cryogenic headache (after eating ice cream), hair wash headache (found most commonly in Indian women, whose hair, due to its length, is wet from washing a good proportion of the time, and thus heavy), coital cephalgia (or “morning after” headache), ictal headache (accompanying seizures), thunderclap headache (sudden severe onset), and many, many more. How would you begin to formulate a coherent approach to dealing with headaches when there are so many kinds and causes?

Fortunately, we can narrow it down. Headaches are conventionally classified as either primary (not caused by another condition) or secondary (you guessed it, caused by another condition). Examples of secondary headaches include those resulting from head injuries, from metabolic and medical conditions, etc. Although hands-on work can still help in many cases, these and other types of secondary headaches usually merit referral to a physician first. This is generally a good practice with any persistent or recurring headache.¹

	TENSION & OTHER MUSCULOSKELETAL HEADACHES	MIGRAINES & OTHER VASCULAR HEADACHES
TYPICAL PAIN LOCATION	Bilateral	One-sided
COMMON PAIN DESCRIPTORS	“Pressure” or “squeezing”	“Throbbing” or “stabbing”
RESPONSE TO ACTIVITY	Usually no change	Usually worsened ²
SENSORY EPIPHENOMENA	Not commonly associated with nausea, light/sound sensitivity, or aura (unless comingled)	Consistently accompanied by either nausea, light/sound sensitivity, or aura (visual disturbances)
REOCCURRENCE	Variably intermittent or persistent	Recurrent, with pain-free intervals
HANDS-ON GOAL	Reduce myofascial tension	Reduce cranial compression

Comparison of musculoskeletal and vascular headaches. Comingled headaches, since they arise from both musculoskeletal and vascular causes, can have characteristics of both types. Approaches for working with vascular headaches will be covered in Part 2 of this column.

Primary headaches are further subclassified as arising from either:

1. Musculoskeletal origins (such as tension headaches and others related to myofascial or articular restriction).
2. Vascular factors (such as migraines and cluster headaches).
3. Comingled causes (that is, arising from a combination of musculoskeletal and vascular sources).

Musculoskeletal headaches are the most common, though not necessarily the most severe. In this first of two articles, I’ll describe a few techniques from Advanced-Trainings.com’s Advanced Myofascial Techniques series that are effective with this type of headache. In Part 2,

we'll focus on ways to help mitigate migraines and vascular headaches.

Let's begin by looking at ways to distinguish musculoskeletal from vascular headaches, summarized in the table on page 111. Although comingled headaches are common, making the distinction between musculoskeletal and vascular headaches is important, because the pain from vascular headaches (such as many migraines) can be made worse by the same techniques that are so effective at relieving musculoskeletal headache pain.

TECHNIQUE: SUPERFICIAL AND DEEP FASCIAS OF THE SCALP

The superficial fascia of the scalp (Image 1, page 110, and 2, at right) is directly continuous with the superficial fascial membranes of the back of the neck, and by extension, the superficial fascia of the rest of the body. Its position on the crown of the head gives it the unique role of connecting front of the body to the back, and left side to right. As such, it is a mediator and transmitter of fascial stresses and compensations elsewhere in the body. Also known as the subcutaneous fibro-adipose layer, it lies between the outer layers of skin and the underlying galea aponeurotica or epicranium. Although this deeper layer is also mainly membranous, it contains the occipitofrontalis muscles. Because the galea is continuous laterally with the temporal fascia overlying the temporalis muscle, it is particularly sensitive to jaw tension. Deep to the galea is the pericranium on the bones of the skull themselves (Image 2).

Besides transmitting strain and referred pain from the rest of the body's fascias, the cranial layers play a direct role in headaches associated with face, neck, and eye strain, as well as mental



2 A stepped dissection of the cranial fascial layers. From bottom to top, the visible layers include the arachnoid mater (thin, red layer just superficial to the brain), the dura mater, the bony cranium, pericranium, galea aponeurotica (with the muscle fibers of frontalis and occipitalis visible anteriorly and posteriorly), and the superficial fascia of the scalp (continuous with the skin, and forming the outer layer in this view). *Image courtesy of Primal Pictures. Used with permission.*

exertion or stress. The adaptability and pliability of these layers is essential to free motion of the underlying sutures and cranial bones. Suture restrictions can play a role in both musculoskeletal and vascular headaches, and so insuring the cranial fascias' differentiation and freedom is a logical first step in working with headaches.

To release the cranial fascias, use your fingertips to move the various layers against each other and against the skull. We're not scrubbing the surface of the scalp or shampooing the hair; we're sliding, shearing, and freeing the fascial layers themselves. Imagine loosening the rind of a cantaloupe around the flesh of the melon: use firm, deep transverse pressure to

assess and release adhesions, pulls, and thickenings. Use a decisive but sensitive touch; be patient and thorough. Spend at least several minutes with this technique, working the various layers over the entire head, adding active movements of the eyes, face, and eyebrows once the outer layers have been released (Images 3–7, page 113).

NUCHAL WINDOW TECHNIQUE

Working the suboccipital muscles is a well-known way to relieve tension headaches. The Nuchal Window Technique is a variation on this approach. With your client supine, place your fingertips longitudinally



3

Use firm finger pressure to slide the superficial and deep fascias of the scalp against one another and against the bones of the cranium. Pay particular attention to any thickenings over the slightly raised lines of the sutures—their freedom will be affected by cranial fascia restrictions.



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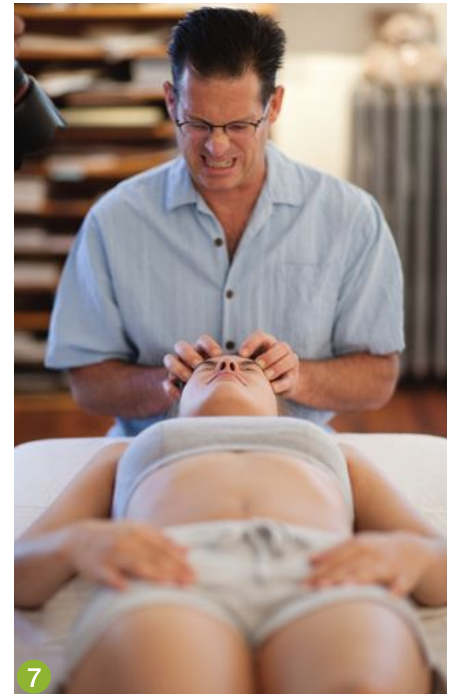
The frontalis muscles (in green). *Image courtesy of Primal Pictures. Used with permission.*



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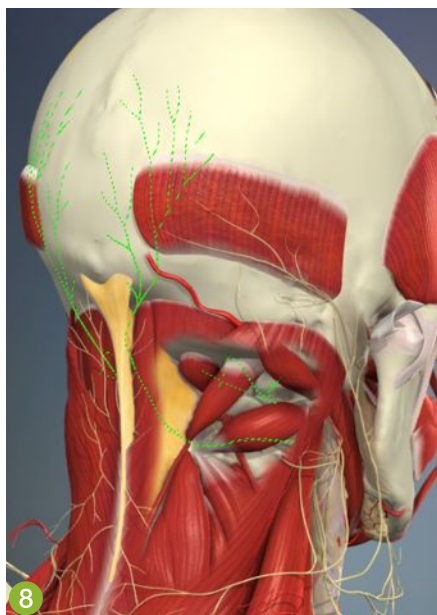


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Because the galea aponeurotica contains the muscle fibers of frontalis and occipitalis, engaging your client's active and exaggerated eye, brow, and face movements will deepen and extend the fascial release. (And no, I'm not working so hard that I'm gritting my teeth—I'm showing my client the face I'd like her to make.)



YOU CAN SEE THESE TECHNIQUES IN *MASSAGE & BODYWORK*'S DIGITAL EDITION, WHICH FEATURES A VIDEO CLIP FROM ADVANCED-TRAININGS.COM'S ADVANCED MYOFASCIAL TECHNIQUES DVD AND SEMINAR SERIES. THE LINK IS AVAILABLE AT MASSAGEANDBODYWORK.COM AND ABMP.COM.



8 The central nuchal ligament (orange) and the suboccipital and greater occipital nerves (green) pass through the suboccipital muscles and play a role in posterior cranium tension headaches. *Images courtesy of Primal Pictures. Used with permission.*

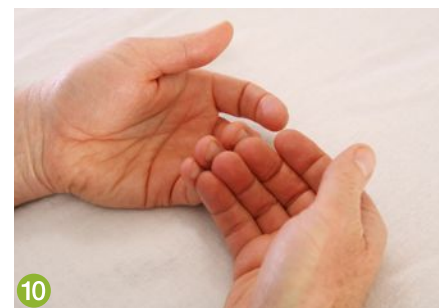
along either side of the nuchal ligament, with your middle fingers just under the occipital ridge at the superior end of the nuchal ligament (Images 9 and 10). With firm but patient pressure, encourage the musculature and soft tissue on either side of the ligament to release laterally. Our intention is to “open the window” of the suboccipital space in order to give more room to the small muscles there and to the important cervical nerves that pass between them (Image 8), often a source of posterior head pain. Although very effective for tension headaches, working the suboccipital region has sometimes been observed to worsen vascular headaches, perhaps because it may increase cranial circulation. Review the distinctions in the table on page 111, and if you suspect vascular elements, use suboccipital work carefully, watching how your client responds.



9 In the Nuchal Window Technique, fingers encourage lateral release on either side of the longitudinal ligament, opening the “window” of the suboccipital space.

Musculoskeletal headaches are seldom related to just the cranial fascia or suboccipital muscles: jaw, neck, eye, and shoulder tension will also contribute to many headache patterns, so think broadly. Although headaches have many causes, the two techniques described here are simple but extremely effective hands-on work that will provide relief and help prevent recurrence when there is musculoskeletal involvement. In the next installment, we’ll look at ways to address migraines and vascular headaches, adding even more options to your technique toolbox. **m&b**

6 *Til Luchau is a member of the Advanced-Trainings.com faculty, which offers continuing education seminars throughout the United States and abroad. He is also a Certified Advanced Rolfer and teaches for the Rolf Institute. Contact him at info@advanced-trainings.com and via Advanced-Trainings.com’s Facebook page.*



NOTES

1. *The importance of referring persistent headaches to a physician for evaluation was driven home to me several years ago when our office manager at the time was diagnosed with a brain tumor that eventually, and tragically, proved fatal. Headaches had been her only symptom. Don't scare your clients, of course, but do insist on screening for recurring, severe, or persistent headaches.*
2. *Although migraine pain is typically aggravated by activity or movement (climbing stairs, bending over, etc.), some cluster headaches (also a vascular headache) can be relieved by vigorous aerobic activity.*