

Balancing Myofascial Tone to Improve Tissue Hydration and Acid-Base Homeostasis

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HYPOTHESIS

Clinical observation, backed up by subject feedback and literature research, suggests that myofascial hypertonicity reduces oxygen in hydration water at a greater rate than can be replenished, even with adequate water intake. The excess of involuntary tension seems to be literally burning oxygen through an increase in charge gradient, rendering hydration water more acid. It also makes tissues drier, denser and tighter, making rehydration increasingly difficult. Clinical practice shows that balancing myofascial tone improves tissue hydration. This seems to also help recover healthy acid-base homeostasis.

APPROACH

The hands-on intervention

A specific hands-on intervention goes into the shape held by hypertonic tissues, takes over the holding and introduces a wavelike motion into the tissue:

The practitioner's hands embrace the shape of the part of the body they are touching and ever so slightly accentuate this shape, taking it into the direction the hypertonic tissues are pulling.
In this manner, the practitioner takes some of the effort out of the pull and
helps the person become aware of the shape and the way it relates to different parts of the body and to the ground.
This communicates recognition and acceptance of these shapes and relationships as they are; in itself, this is a factor that helps clients to relax and rest within the way they are and move.

In order to introduce an effective wave-like motion, it is important that the practitioner's body is well supported and aligned in gravity:
Practitioners must be aware of the placement of their feet on the ground and of their hands on the client's body,
while making sure that the inner space of the body between feet and hands is open, so that movement and gravity can flow through it unhindered.
The practitioner moves in an arrhythmic rocking motion over his/her feet.
In this manner the motion moves through the practitioner's body from the ground up into the client's body to the precise location aimed at.
For the client this feels like being moved by a greater force. If the practitioner shows them the difference between this kind of motion and another that is created without alignment or support in gravity, they invariably recognize it at once and like this begin to learn how to perceive also their own body in relationship to gravity.

The wave-like motion generated by the hands-on intervention
in and of itself incites hypertonic tissues to relax through stimulation of different mechanoreceptors [1], <ul style="list-style-type: none">– Golgi – reduces muscle tone– Ruffini – reduces sympathetic activation– Pacini – proprioceptive feedback for motor control– Interstitial – raise vasodilation and probably also plasma extravasation– muscle spindles – inverse myotatic reflex [2]
enhances fluidity of movement and sliding in fasciae that have become sticky, engrossed and dense due to excess loads, tensions or poor weight distribution
is comparable to a sonar wave, in that it makes it possible to localize deep tensions with precision and bring them to the client's attention, so that the client can <ul style="list-style-type: none">– increase the tension voluntarily, so as to be able to<ul style="list-style-type: none">• identify it• find out what it is good for• resist the intervention• let go at least the part that was increased voluntarily, probably also a bit more– allow the wave-like motion to soften it– allow the motions of breathing to soften it
is experienced as pleasurable as it travels through “open” spaces in the body, particularly when the space around the gravitational axis is open
is experienced as helpful when colliding with tight, tense, closed off or painful spaces in the body

Education of sensory perception

The hands-on intervention is combined with education of perception of movement and body shape in relationship to the gravitational field of Earth, so that subjects can learn to perceive and modulate their movements and body-shape in space.

At the beginning of each session a few points of reference are established in standing and walking as to how clients perceive their body in terms of the relationship between
different parts of the body
the whole body and the ground
the inner spaces of the body and the space around it

Most sessions take place with the client lying down, fully clothed, on a padded tables during a large part of the time, although some sessions might be carried out in sitting. In both modalities, the hands-on intervention creates multiple occasions for clients to learn to recognize their sensory perception in greater depth. It becomes thus possible to recognize
their pattern of habitual holding as well as
the flow of sensations they are managing through this pattern,
the belief systems installed around those sensations
withheld emotions

Throughout the session time is dedicated to process the meanings associated with the sensory experience that comes to awareness in order to establish to what extent they
are valid for present times or
were valid within the context in which they were generated, but are so no longer.
are based on an error, misconception, or misunderstanding due to the limited experience of the child evaluating the situation the meaning was generated in

The motions of breathing are an important
indicator of hypertonicity (severely reduced motions, often the bare minimum indispensable for survival)
tool for balancing myofascial tone <ul style="list-style-type: none">– through allowing time for them to happen– the key is in the exhale– and a moment of rest at the end of the exhale– giving way to a generous inhale
tool for fostering sensory perception (proprioception and interoception)
opening different parts of the body from inside
one way the body eliminates positive charge/acidity

At the end of the session, body shapes and movements are compared in standing and walking with the points of reference established at the beginning.
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A safe space

The excess of involuntary tension impairs the flow of sensations. Since repressed emotional contents may rise above the threshold of consciousness, when the tension diminishes, another essential element of the approach is the creation of a safe space where internal balance can be restored after trauma and interrupted emotional processes can be completed. Confidentiality and anonymity are key features of a safe space. Reliability in terms of compliance with agreed times, fees, and physical space where the work takes place are further ingredients that create a framework to make the work of releasing involuntary tension secure. Helping the client understand their tension as a means to allow them to manage difficult experiences in the past rather than something they are doing wrong and should try to get rid of, adds greatly to the safety of the space.

Sustaining and enhancing effects over time

The effects obtained through this hands-on intervention in combination with the education of sensory perception and processing of meaning associated with sensory experience in a safe space can thus be sustained and enhanced over time. Because clients get to know their pattern both on the cognitive and sensory level, they are able to develop alternative options of being and moving in their

body with more support, i.e. better alignment in gravity and, therefore, a more balanced myofascial tone. The possibility to practice the alternative options, whenever subjects notice their pattern, empowers them. Thus trust in the abilities inherent in their own being as well as in the reliability of their natural environment is enhanced. This trust can then be made extensive also into the area of social relationships. The general tendency of gradually increasing tension until the exhaustion of old age is reduced on all levels of experience, physical, physiological, psychological, emotional, mental, and probably also spiritual.

RESULTS

Results are based on visual and tactile practitioner evaluation and subject feedback. Through the wave-like motion of the hands-on intervention, both practitioner and client can feel the dry and fibrous quality of hypertonic tissues, as well as tissue hydration improving, fibers gaining in elasticity and movement becoming more fluid, as involuntary tension diminishes.

Subjects often describe a feeling of electrical charge, when myofascial hypertonicity begins to subside, before a more balanced tone is achieved. Although this sensation of charge is not pleasant, it can be used to help guide the client's attention towards the areas of the body where to allow the motions of breathing or movements of response thereto to promote the possibility of resting into gravity with the exhale and bringing in new energy and movement with the inhale.

In general, sensory perception (propio- and interoception) improves as well as, therefore, motor control and self-care. Also, subjects gain in resilience and responsiveness. Their tolerance to stress is enhanced. Pain is reduced. Chronic inflammations diminish. The pressure on joints due to myofascial hypertonicity is reduced, so that together with better hydration and less acidity joints are better protected against wear and tear.

Electric Charge and Acidity

A charge separation occurring in water next to hydrophilic substances, like proteins, described by Gerald Pollack [3, 4], might explain the sensation of electric charge reported my numerous clients, leading the author to the hypothesis that myofascial hypertonicity

might generate a stronger charge separation than tissues with a balanced tone, bringing about an electrostatic field which might impair movement even further, adding its effect onto the high density and stickiness of hypertonic tissues, and interfering with the flow of sensory information. As some of the tension is relaxed, sensory information begins to flow a gain, enabling the subject to perceive the electric charge, the stickiness, the dryness, the density and also the juiciness, sponginess, flow of energy, and fluidity of motion setting in, even if only a bit of tension has been released. The immediacy and all-embracing quality of this shift feels like a switch being flipped that turns the electrostatic field off, allowing the flow of information in the shape of electrons and protons.

might reduce more oxygen than tissues with a balanced tone. Like the proteins of muscles and fasciae themselves, the layers of water closest to the protein are negatively charged (exclusion zone, ez). [5] If it is true that to keep up the elevated tissue tone oxygen is reduced at a greater rate than in tissues with a balanced tone, positive charge would gradually be increasing in the surrounding hydration water, while the negatively charged layers would become thinner. The more positive the charge, the more acid the remaining hydration water would be becoming. [3, 6]

restricts the motions of breathing often to the point of the indispensable minimum for survival. The exhale is one of the ways in which the body eliminates positive charge/acidity. Therefore myofascial hypertonicity may not only be generating an increase in acidosis, but it definitely diminishes the body's natural way of eliminating it. Some clients actually describe the general sensation in their body as acid or corrosive, recovering a sense of “sweetness” as breathing gets slower and deeper.
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interferes with the hypertonic tissues' ability to rehydrate due to the high density resulting from their tightness, which makes it mechanically difficult to take in fresh water and, thus, oxygen with all its electrons. Another factor may add to this difficulty: the layer of more positively charged water generated by the charge separation might act like a membrane, keeping the negatively charged ez water separate from the influx of fresh water.
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CONCLUSIONS

Clinical trials are necessary to support the hypothesis that myofascial hypertonicity dehydrates and acidifies muscles and fasciae, and that hydration and acid-base homeostasis can be restored through the threefold intervention described above. Since acidosis fosters inflammations and may, thus, end up being a forerunner for more serious diseases, like cancer, the implications for healthcare and preventive medicine seem most useful. Association with people or institutions with the necessary equipment, know-how and financial means to run these trials are sought.

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