

Connective Tissue; the Connecting Spirit and Structure of Tissue

by Lorna McNeur

Lorna McNeur is a university lecturer in Architecture who is interested in psychology and space in relation to issues of body and building. Experientially and intellectually Biodynamic Massage enables a rich exploration of these deeply profound issues.

Connective Tissue is an organ, which is as large and as extensive as the body itself.¹ In its very name is embodied both its most profound function and metaphorical role. Both separating and connecting simultaneously, and permeating the entire body, this is a rich and complex tissue whose very fabric is symbolic of a way of being in the world that is mirrored in the lives of people and their communities, both personal and political.

Providing a network of connections throughout the entire body, connective tissue includes tendons, ligaments, cartilage, bone and the surface linings of the body cavities. Covering the entire periphery of the body, and permeating horizontally and vertically throughout, the connective tissue membrane surrounds every 'muscle, bone, nerve, organ, and vessel down to cellular level'²; thus creating a safe, healthy and bounded enclosure for each. In this way, connective tissue can be seen metaphorically as the inner skin of the body that serves a similar but very different function as the outer layer of skin of living beings. Connective tissue is meaningful on many levels simultaneously.

The skin is the physical boundary of the body that separates and connects a person to the world around them. The skin defines the limits of the inside world of a being, enclosing their most sacred and primordial spaces whilst also serving to present a public face and profile to local and larger communities.³ Like the skin around the body, the connective tissue surrounding every element of the body serves to define, separate, and connect them all to each other in their own complex community comprising the inner world of the living being. Ida Rolf refers to connective tissue as the "universal internal environment".⁴

Although connective tissue does not comprise living cells, Dean Juhan explains that it contains fibroblasts that have the unique capacity to "migrate to any point in the body, adjust their internal chemistry in response to local conditions, and begin manufacturing specific forms of structural tissue that are appropriate to that area."⁵ This ability to change form into whatever is required at any point in the body is an essential magic of connective tissue. Juhan refers to connective tissue as a fluid crystal ground substance that can vary considerably from a watery sol-state to a viscous gel-state: from a gelatinous substance to elastic or as 'hard as stone'.⁶

Network

John F. Barnes speaks of this rich and complex network of connective tissue in his article on "The Myofascial Release Approach". He explains that "the fascia is a tough connective tissue that spreads throughout the entire body in a three dimensional web from head to foot, functionally and without interruption."⁷ Since the fascia (connective tissue) covers not only the entire body but also all the organs, bones, muscles, etc. within, then it is possible to imagine in one's 'minds eye', the whole body being described by connective tissue alone."⁸

Structurally, connective tissue works in conjunction with the bones towards the body's efforts in counterbalancing the earth's gravitational pull. This happens in the continuous balance of tension and compression between the connective tissue and the bones, respectively. Barnes makes the point that the bones are not acting to simply take the gravitational load to the ground but are actually held in compression by the fascial tension network, which strongly contributes to the distribution of the downward load throughout the body. Barnes explains that, "more weight is actually borne by the connective tissue system of cables than by the bony beams."⁹

Seen in this way, the body can be perceived, not as a sack that is constantly working to remain vertical by resisting the gravitational pull but rather as a mobile sculpture whose structural members are constantly interacting horizontally, diagonally and vertically through a shifting dance of tensile and compressive forces, that eventually touch earth, from which they receive essential grounding energies.

Massage

Herein lies the polar conditions of the live energetic being whose energies are flowing fully as compared to the soul whose life experiences have burdened him or her with emotional weight that can feel equal to the force of gravitational pull. Biodynamic massage addresses these discrepancies through healing massage which works to reconnect people to their original life force energy. As Clover Southwell points out, "Bio means life: dynamic means force."¹⁰ Biodynamic massage invites the life force.

This is carried out through various different massages, all of which include the integration of a psychological and vegetative process. Specifically, work on the connective tissue involves basic touch, emptying, hypotonus work, periosteum work, and some areas of energy distribution, stretching and holding.¹¹ Connective tissue work can be given with differing intentions in mind. These include a 'matter of fact' approach that involves a tempo increase as compared to a full hand touch that aims at a soothing and relaxing of the connective tissue membranes. A third method is similar to the 'matter of fact' touch but engages more with emptying massage. Here the massage therapist works more with her fingertips to encourage the emotional digestion of energy which is physically manifested in (and heard through) peristalsis.

I was once working in this way down the arms of a client whose left arm was fine and she enjoyed all this but when I came to her right arm, she anxiously explained that her hand felt like a claw. In fact, her hand at that moment was contorted into a claw like form. Switching to more appropriately gentle massage for this anxious arm, I worked with basic touch, holding, and with bone intention. She began to remember a traumatic time in her childhood when she did not receive any comfort after breaking her arm. Her sister had jeered at her for needing attention and her mother had dutifully taken her to hospital for 'repair', but was not forthcoming in consolation. Whilst working carefully and mindfully on her arm, the peristalsis digested the pain of so long ago, and eventually her hand began to relax and lose its claw-like configuration, and 'feel like a hand again'.

In Southwell's article on, "The Energy Distribution Treatment", she discusses the idea of the river of energy flowing through the body.¹² Calcified connective tissue in the joints or in the outer fascia layer surrounding the body can create deposits that can act as stones or rocks preventing the natural flow of energy through the body. This is what I perceived in a client who felt tension and pain up in the general area of her scapulae. She had been working very hard and consistently without allowing herself much, if any time for rest and relaxation. After listening for a while, I felt that connective tissue work in this area might produce a deep relaxation and invite a flowing of energy to this area. With gentle soothing full hand touch moving very subtly with intention into the connective tissue between the skin and the muscle, she fell into an alpha state of relaxation and eventually emerged refreshed.

Congestion in the joints

Ebba Boyesen discusses the blocking of energy in terms of the joint areas. She describes the "residual body fluid becoming static or frozen and remaining as a calcification in the body, mainly as insoluble calcium salts in the tissues in and around the cartilage of the articulations of the skeletal framework of the body"¹³ Joints like shoulders, elbows, wrists, hips, knees, and ankles comprise, a discontinuity of bone and muscle tissue"¹⁴ and an intense complexity of bones, ligaments, tendons, cartilage, veins, etc. all within a relatively small amount of space.

These areas can easily become congested with deposits and can benefit from energy distribution massage to keep energy flowing through these potential 'bottle-neck' channels. Working carefully and thoroughly with the fingertips reaching these multifaceted nooks and crannies of the beautifully complex joint structures can help to encourage the flow of energy through these channels. Lifting and stretching work can also encourage energy flow by gently easing congestion. Very gentle energy distribution, stretching and holding worked well on a client of mine who was suffering from a few different afflictions, one of which was a mild form of gout in his wrist and toe. This was making life difficult for him since he used his wrist a lot for manual labour. Since the joints were actually not very inflamed or painful, I was able to encourage the energies through with a very light touch. Doing so over a period of time relieved the symptoms that have not returned. To avoid harming more inflamed joints, auric work can be very helpful.

Hypotonus work on the ligaments and tendons in the larger areas of the arms, legs, and torso is also a very helpful connective tissue massage. Other large area massage also includes bone intention work. One client was suffering from the manufacturing of too many white blood cells in her bones. We decided to maintain a

continuous programme of bone holding in which I focused my healing intention exclusively into her bones for a number of consecutive sessions. We were deeply relieved when her doctor reported that her white blood cell count had dropped from 490 to the much safer level of 330 (400 was considered the safety zone). The massage may have been instrumental in this progress, along with the medicine prescribed.

Energy flow

For a healthy being to thrive, the river of life energy needs flow freely through the body, at a pace appropriate to each individual. Tissue armouring is another way in which the body tries to protect itself from once threatening situations that may no longer be present. Gerda Boyesen speaks of "the tissues being clogged with emotional stress products which prevent the energy from streaming through."¹⁵ I have experienced this feeling in my shoulders and back and have had instant relief after swimming, thus connecting me to the fundamental need to have consistent exercise. I have also worked on clients in these areas and found that very subtle full handed basic touch which converses with the thin fascial layer between the skin and the muscle, has a very calming affect. Lillemore Johnson explains that the inhibition of "deep-seated expressions of good feelings is mostly to be found in the ligaments of the small muscles of the chest, sacrum and shoulder-neck regions."¹⁶

Clyde Ford addresses cranio, sacral, and chest holding in his book, *Where Healing Waters Meet*. Whilst reading through the Somato Therapy and Somatosynthesis section, I found his description of pelvic diaphragm holding so convincing that my own muscles relaxed somewhat during the process of reading.¹⁷ The whole pelvic area is so very full of tendons, ligament, cartilage, etc. that it is ripe for connective tissue attention. Ida Rolf refers to the pelvic area as 'the seat of the soul' which she believes is physiological.¹⁸ Releasing stresses in this area through holding can help a person to sink down into the depths of their soul in such a way that it can feel that they have come home for the first time in their life.

The craniosacral system

John Upledger writes about the craniosacral system in terms of the relationship between the cranium, the spine and the sacrum. Both the cranium and the sacrum have very little if any muscle in between them and their covering skin. Consequently, connective tissue massage on the cranium and sacrum can be easily accomplished and, from my experience, is always gratefully received. The head and lower back are rarely touched on an every day basis. Massage of these two vital areas seems to bring enormous relief and vital wellbeing; not to mention peristalsis. There is much to be learned from craniosacral work.

Upledger discusses the cerebrospinal fluid and its containment in the dura mater membrane bag.¹⁹ This fluid has been likened to a fundamental fluid of life containing a primal pulse that holds the deepest secrets of ones life force, and beyond. I have always felt that the sacrum is a sacred place, as indeed its name implies. This is the area of the lowest (deepest) chakra whilst the head is the highest. The positions of the cranium and the sacrum at either end of the spine make obvious their essential roles in the cosmos of the body.

Stanley Keleman, in his book *Emotional Anatomy*, describes the three layers of a single cell and the early embryological stages of the cells of a foetus. Connective tissue originates from the mesoderm middle layer of these early cells. Keleman explains that the endoderm is the inner layer, "the secret deep ancient past and present ... the middle is the volitional self, modulating between inner and outer ... the outside is the boundary, the social self", the ectoderm.²⁰

How extraordinary it is that there is an organ of non-living tissue which is as large as the body itself that touches every cell within. It is almost as though there is a white milky being inside each one of us, who mediates between the deep inner world and the daily world around us. If you close your eyes and imagine your connective tissue permeating your entire body, feeling deeply, you may 'see' the presence of this spirit within you, who knows where you need healing and who radiates life force, connecting us with ourselves.

References

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