Cellular Consciousness and Healing

by John F. Barnes, PT Special to PT Today

Our model of reality is deepening and expanding with the help of new scientific, electronic microscopes and sophisticated techniques.

My experience had been that consciousness infuses our entire being. For years I have taught that fascia on the microscopic level is actually a three-dimensional web of tiny, hollow tubules filled with fluid carrying information. This information in the form of thermal, electromagnetic and mechanical energy is transmitted to all aspects of the mind/body complex via myofascial release for healing on the deepest levels.

The old way of observing this phenomena was to try to break everything down into its lowest common denominator; the reductionist model. Until quite recently there have been very few experiments set up to observe the living system. Biology has a long tradition of fixing, pinning, clamping, pressing, pulping, homogenizing, extracting and fractionating.* This unfortunately gave us a very limited and distorted understanding of the interrelationships of the whole living system.

CELLULAR CONSCIOUSNESS

Has an understanding of consciousness eluded brain researchers because they have limited their focus to the brain?

A major international conference was recently held in Cambridge, England called "Beyond the Brain: New Avenues in Consciousness Research." Speakers included many of the world's most eminent theorists of consciousness experience including Nobel laureate physicist Brian Josephson, neurologist Stuart Hameroff, psychiatrist Stanislav Grof, evolutionary scientist Ervin Laszlo, and psychologist Charles Tart. The conclusion of the conference is that there is evidence of a shift away from the premise that consciousness is a mere byproduct of brain processes.

Science is in the throws of a deep-seated revolution. When you look at the evidence that the mind is not confined to the skull you automatically expand the horizons of research. Many people are now realizing the ways in which we have been limited by the assumptions of science.

Reductionists tend to overlook the fact that neurons are alive and traditional views of the hierarchical organization of the brain stop at the synapse as the fundamental switch, analogous to bytes in computers. The complexity of neurons and their synapses, however, are closer to entire computers than individual switches. This implies the mechanism of consciousness may depend on an understanding of the organization of adaptive (cognitive) functions within living cells.*

Is fascia the physical basis for the emergence of consciousness?

Recent discoveries support this suggestion. Two of the leading researchers on consciousness, mathematical physicist Roger Penrose, and Stuart Hameroff have stated that past brain/consciousness research had been severely limited by scientists not looking deeper than the synapse of the nervous system.*

With the help of new, sophisticated electronic microscopes capable of incredible magnification, Penrose and Hameroff have discovered microtubules filled with fluid within the cytoskeleton of the cell.

THE NERVOUS SYSTEM OF THE CELL

The famous neuroscientist C.S. Sherrington observed the cytoskeleton may act as the nervous system of single-cell organisms. Synaptic connections are formed and regulated by cytoskeletal polymers, including microtubules.*

Penrose and Hameroff speculated that the cytoskeleton is like a micro-myofascial system, within each cell. This micro-myofascial system is made up of a skeleton of tubules filled with fluid and surrounded and interconnected from cell to cell by a viscous ground substance.

They go on to suggest that using the quantum field theory, that ordering of the water molecules and the electromagnetic field confined inside the hollow microtubules core manifest a specific collective dynamics called "super radiance." Accordingly, each microtubule can transform incoherent, disordered energy (molecular, thermal or electromagnetic) into coherent photons within its hollow core.*

This information supports the continuity of the myofascial system from the inside of the cell to the very periphery of our being and the holographic model of reality where photons (light) are transmitted as information throughout the mind/body complex. Consciousness (information) is necessary for healing. Consciousness may emerge as a macroscopic quantum state from a critical level of coherence of quantum-level events in and around a specific class of neurobiological micro-structures: cytoskeletal microtubules within neurons.*

THE PIEZOELECTRIC PHENOMENON

This information about how information/consciousness is transmitted through the hollow core of the microtubules to all aspects of the mind/body helps to deepen our understanding of the piezoelectric effect when the myofascial system is treated.

The fascia is a piezoelectric tissue; therefore when a therapist utilizing the gentle, sustained pressure of myofascial release through compression, stretching, or twisting of the myofascial system, generates a flow of bioenergy (information) throughout the mind/body complex by the piezoelectric phenomenon.

This facilitates the extracellular matrix to transform as it undergoes its "sol to gel" reorganization during myofascial release. Fascia is behaving as an electrically conductive medium which allows this viscoelastic tissue to rehydrate under the sustained pressure of the therapist's hands.

This rehydration also allows for an elongation of the myofascial system relieving the pressure on pain sensitive structures for alleviation of the symptoms of pain, headaches and the restoration of motion.

CELLULAR CONSCIOUSNESS AND HEALING.

So we are connected—from deep within each call of our being flows information/consciousness via light energy (photons) throughout all aspects of our mind/body.

The incredible magnification of our new electronic microscopes has allowed scientists to see myofascial structures within the cell that expand our knowledge and provide us with a more accurate understanding of our fascial system and its importance to the healthy functioning of our mind/body.

There is an avalanche of new information coming out on the deeper structures of the cell, the myofascial system, holography and the piezoelectric phenomenon. I will go into more detail in future articles on these fascinating subjects.

Myofascial release and the other excellent "hands-on" therapies give the therapist powerful healing techniques to effectively, cost-efficiently and comprehensively help your patients realize their full potential.

References:

- 1. Ho, Mae-wan, the rainbow and the worm, the physics of organisms, World Scientific Publishing CO, Singapore, 1993.
- 2. Journal of Consciousness Studies, 1, Summer 1994, pp. 91-118. #. Penrose, Roger, Shadows of the mind, 1995

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