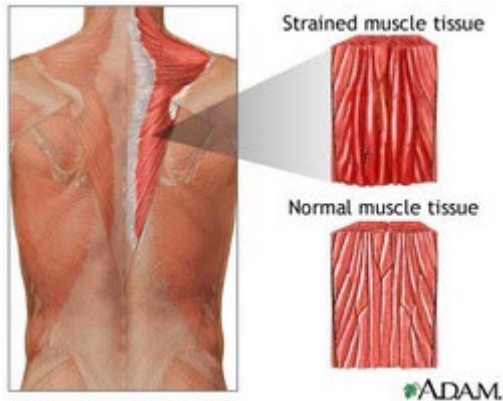


Trauma



Trauma by enlarge is the consequence of any internal or external experience that destabilizes the mental, emotional, physical and spiritual integrity of a living organism. The perception and interpretation of such events define the degree and depth of the affliction. The cumulative effect of life's traumas actually gets stored in our body's memory bank and shapes every aspect of our existence. The trauma spectrum is as wide as life itself. It starts with the state of consciousness our parents found themselves in at the moment of conception and continues virtually with any event or exposure that is labeled as "threatening" by our inner observer as stated above.

Our body is a community (village) of 50-75 trillion cells. There is no function that the human body has, that is not already represented in the cell. Therefore when it comes to understanding complex processes of healing and sickness, we have to begin our journey at this level. Healthy cells make healthy organs and tissues and healthy organs and tissues make healthy systems, healthy systems make healthy bodies.

"The cell is immortal. It is merely the fluid in which it floats that degenerates. Renew this fluid at regular intervals, give the cells what they require for nutrition, and as far as we know, the pulsation of life can go on forever."
Dr. Alexis Carrell - Nobel Prize Winner

Trauma disorganizes life processes. Any mental, emotional, physical or spiritual event can potentially be perceived as traumatic to the living cell. Modern science discovered that our cells have two basic programs for survival, one is protection and the other one is growth & reproduction. When we walk into a new environment one or the other program is kicking in, but cells cannot function in both these modes at the same time due to the intrinsic nature and design of these mechanisms. Therefore when cells are confronted with an environmental signal, they have to make a decision. When cells choose the protection mode, they stop growing/regenerating and vice-versa. The more protection we "think" we need, the more we shut down our growth and regeneration mechanisms. That's how fears (scarcity, terrorism etc.) can manipulate the cellular level of any living organism and stop it from growth, regeneration, recreation and therefore vibrant health. Love, on the other hand enhances life. Studies performed in eastern European orphanages showed a statistically significant decrease in the growth of children (30%) in the group where love was not "used" compared to the other ones, while being fed the same diet.

Our bodies are made of 70% water (90% at birth and gradually decreasing to sometimes 50% in old age). All our organs, systems and tissues (bones and muscles included) are contained within a substance called fascia (connective tissue).

Fascia is a membranous sheet covered with a sticky, lubricating fluid. Peel an aloe-vera leaf and you'll get the picture and the feel. It is a continuous envelope that extends from head to toe, front to back, surrounding every organ, every blood vessel, every nerve, every bone and every muscle. An envelope that changes thickness as it extends from region to region. Its purpose is to support and lubricate. An example of its function: It prevents the muscle it surrounds from catching on its neighboring muscles as it contracts.

Anatomists, lead by an allopathic (mechanicistic-Newtonian) model of thinking, have broken this continuous sheath of tissue into small pieces therefore ignoring its continuity and giving the same structure different names as it passes from one part of the body to the next. It is in the continuity of this lubricating supportive envelope that we understand its function. The tendency to break it down into little pieces confuses and disorients everybody and interferes with our ability to understand the fundamental holistic medicine principle of UNITY OF STRUCTURE AND FUNCTION.

Microscopically, fascia is composed of collagen and elastin. Collagen is arranged in tiny micro-tubules. Form follows function (function makes the organ). These tubules are transporting "tissue fluids."

Blood vessels and nerves travel within the fascia to arrive at their designated end organs. In turn, fascia itself receives a profound number of nerve endings. The fascia is a fundamental structure in which the circulatory system and neuro-endocrine system converge.

Fascial continuity, its nervous system investments and vascular relationships clearly demonstrate how all parts work together. The body functions as a Unit. Pull on a persons arm, they feel it in their shoulder and neck, even if only the skin is tractioned. In health, fluids flow with relative ease from one fascial compartment to the next. When a traumatic event occurs, the fascia twists and compresses. The transport of fluid becomes disrupted. As the flow of the tissue fluids becomes obstructed, physiology (function) becomes impaired.

In osteopathic treatment, the continuity of fascia becomes practically applied on a daily basis. When the fascia becomes compressed or twisted, the tensions are transmitted along the fascial planes. Thus, an individual may experience hip pain, but the tissues might be restricted much lower down, in the ankle, pulling on that hip. This transmission of tension through the fascia is referred to as Fascial Drag.

"This connecting substance must be free at all parts to receive and discharge all fluids, and use them in sustaining animal life, and eject all impurities, that health may not be impaired by dead and poisonous fluids."

A.T. Still M.D., known as the Father of Osteopathy

Osteopathic treatment is oriented toward unwinding the fascial strains and re-establishing fluid continuity throughout the body. We live and breathe through our fascia. When our fascia is free, we are free.

"The soul of man, with all the streams of pure living water, seems to dwell in the fascia of his body."
A.T. Still M.D.



Major events such as broken bones, ruptured ligaments, severe bruising from falls (skateboards, horses, bikes, skiing etc.), car accidents, etc. are obvious traumas (insults) to the living body.

Deliberate surgical procedures can be life saving at times, none-the-less represent an insult to the structural and functional integrity of the body, not only due to the procedure itself but also by the scar tissue formed as means of healing.

Trauma can also develop during a profound disease process, such as the laying down of scar tissue in the lungs following a severe pneumonia. It can also be as subtle as repetitive action, overuse injuries, gravity, and time. When trauma occurs, it does not merely pass through us. The impact leaves an impression in the fascia in the form of an absorbed energy that manifests as a tightening, hardening, blocked energy, or an abnormal pattern of motion locked in the tissue. The body is under shock. The dynamic organizing principle (homeostasis) within our bodies must re-organize.

The trauma implants itself in the fascia, and the nervous system now arranges itself around the focus of that implanted trauma. This phenomenon is called an Injury Pattern. Think of a construction site or accident on the freeway, where police surrounds and isolates the affected area with a yellow caution tape. It is the same way the body protects the area. But it is disorganizing. This happens on a microscopic level. It happens everyday. It is often inconsequential. However, if the impact is huge, or of a long duration, or many small insults accumulate... then the reorganizing of balanced tensions becomes significant.

When bones break, some of the energy of the impact is absorbed in the soft tissue (fascia) but most of it is often simply discharged. In a clean break, the body can actually heal more thoroughly. Contrary to common thought, it is when no bones are broken, that chronic injury patterns become more imprinted thus creating lifelong dysfunctions.

Bones grow in the direction of the stresses put through them. This is known as "Wolfe's Law." This is why orthopedic surgeons will place a walking cast on a broken leg. The physical stress of walking helps the broken bones grow together more readily.

Suppose an old whiplash injury sets up a complex strain pattern through the cervical spine (neck). Over time, if the energy of the trauma remains in the tissues, the bones will change shape and grow, following the strain forces. Long standing traumatic influences are the leading cause in the development of Degenerative Arthritis. The bones erode and spur. This can be assessed on an x-ray. Because we are each genetically unique, we differ in the degree to which we develop this arthritic response to chronically held soft tissue strains. Eventually everyone has some degenerative arthritic changes visible on x-ray. After the age of 50 mild degenerative arthritic changes are considered a normal finding. Two reasons for this are:
Dot

- Everyone has experienced some trauma in their life.
- Dot Gravity is a constant "micro-trauma".

Degenerative Arthritis literally changes the shape of the bones. If advanced enough, the vertebrae will no longer rest upon one another with ease. What once was a state of rest, now requires active work. And when there is a superimposed injury, the resources for negotiating the strains are further limited.

Osteopathic Manipulation removes the strain, restores some physiologic flexibility and allows the tissues to better negotiate the arthritic changes.

So when Osteopaths take a medical history of the patient, they are interested in all the blows to the body that each of us has experienced.



Many patients will say... "I have never been injured...I never broke any bones or went to a doctor." We so easily forget that fall down the stairs, or the car accident (where the car rolled three times); where we got up and were surprised not to be hurt. We readily dismiss the importance of these events. These injuries do, in fact change us; we simply do not recall the way we were before the injury. The body, however, does not forget. These traumas imprint themselves in the tissues, causing us to compress, twist, and contract. Only years later might these injury patterns create health problems. The extra cellular fluids that bathe each cell, thereby providing a nourishing environment and removing the wastes, become stagnant. It is not just blood and lymphatics but all the liquid secretions of the body, even the cerebrospinal fluid that surrounds and nourishes the brain that can be affected.

"The cerebro-spinal fluid is one of the highest known elements that are contained in the body, and unless the brain furnishes this fluid in abundance, a disabled condition of the body will remain. He who is able to reason will see that this great river of life must be tapped and the withering field irrigated at once, or the harvest of health be forever lost."
AT Still M.D.

The bottom line is that old traumas are often under-appreciated when considering the multi-factorial causes of illness. Osteopathy provides a unique perspective, and in some instances an unexpected solution.