

MYOFASCIAL PAIN – A MULTIDISCIPLINARY APPROACH

By John Sharkey NSSM (continued from OTMS 20)

ASSESSING DENSE AND LOOSE CONNECTIVE TISSUE

During a treatment, the bodywork therapist may structure a general bodywork session by firstly offering some gentle but firm full or local body rocking with compression. This helps to lower sympathetic tone in the musculoskeletal system and allows a rise in parasympathetic tone, the visceral system. Body rocking offers a mild stretching of both superficial and deeper layers, while compression invites increased blood flow and tissue temperature. This phase is best suited to fascial unwinding e.g. harmonic technique or mechnotherapy. This phase might involve stretching of the skin, subcutaneous and superficial layers, by compression with the palm of the hands, while rotating each hand in opposite directions. An increase in surface blood flow while attending to any adhered superficial tissue can be achieved with skin rolling, taking care not to pinch the client. This gentle approach results in a softening of the more superficial structures allowing the client to further relax and the therapist to access deeper soft tissue or skeletal attachment sites. This alone can offer powerful therapeutic benefits including reduced sense of stress, fuller and longer breaths, reduced heart rate, increased and less restricted range of motion and more.

When the musculoskeletal system is out of balance the tension created to support an upright position begins to rise in a series of body areas that are not capable of coping with such tensions or forces. This is why so many clients complain of pain and discomfort in the feet, skin, knee, groin, hamstrings, low back, neck and jaw. A global view is required of the practitioner to consider the cumulative effects of the parts on the whole. Connective tissue responds to physical and chemical stimuli. Understanding this mechanism allows the practitioner to manipulate a specific therapeutic outcome. When you place your hands, fingers or elbows on the skin and apply pressure you will have an effect that is superficial, deep, head to toe. Fascia is an organic crystal and semi-conductor. When a crystal is compressed it generates a small electrical signal. This in turn informs the cells how to pattern their activity. Thickened tissues, which are dense, are also dehydrated and are unable to effectively conduct electricity through specific areas of the body resulting in compromised function. Electrical conductivity in tissue is reliant on the volume of water in the extra cellular matrix, the ground substance. When fascia shortens and thickens, it dries out the water and the ground substance begins to become gel-like, sticky and similar to glue. This glue now binds and adheres fascial planes together. The end result is restricted movement, a thickening and migration of the collagen tissue. This is why you can sometimes feel a ‘golf ball’ in a client’s shoulder.

When you are offering soft tissue manipulation to your clients, take a moment to appreciate that the tissue you are working on is mostly water. 75 - 80% of muscle is water. When there is a neurological or orthopaedic involvement, there is dehydration and cardiovascular retardation. Tissues are now forced to work in a less than aerobic state. As long as the cells receive a minimal supply of nutrients, they will continue in this state. This anaerobic state presents a metabolic backup of lactate, bradecinin, phosphate and other irritable and noxious substances. Simply to touch such areas can be painful. Whatever the cells are programmed to do, they cannot perform their function to the best of their capacity. It could be a cell involved with secretion, contraction, nerve activity, digestion, etc.

When tissue is stressed or injury is sustained, surrounding healthy fibres will contract to stabilise the area to ensure no unwanted movement occurs. This is known as ‘muscle splinting’. The body carries it’s own quick drying cement in collagen. The rate of collagen assembly exceeds the rate of removal and extra tissue builds in the injured area, a lump, a pad, and an area of thickened tissue. You have all felt it I’m sure, during massage sessions. This in turn, leads to a sequence of events which irritates nerve endings and perpetuates sensory arousal which will fire back into the spinal cord and will travel both up and down the cord, spilling out from other spinal segments causing fibre contraction and pain elsewhere. This means you could have a problem in the SCM, yet experience pain in your lower jaw or the top of the head, in your teeth or above the eyes. Treating the pain may only offer temporary relief. The therapist or bodyworker must locate the strain pattern, the short tight and the congested thickened tissue/s. Of course injury is not the only cause factor in myofascial or skeletal pain and dysfunction. Poor seated posture, daily habits such as holding a phone between the head and shoulder, poor posture during lifting and a host of other soft tissue and hard tissue stresses, all combine to create an environment which supports increased tension, short or lengthened, but stressed musculature and eventually postural adaptations and/or pain.

**John Sharkey will be presenting ‘Multidisciplinary Approaches to Myofascial Pain
on 2nd and 3rd March 2002.**

Come and work with John at the Conference – “HANDS ON ALL THE WAY” –
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