NeuroMuscular Reprogramming
The Missing Link in Rehabilitation

By Jocelyn Olivier

Neuromuscular Pain and the Need for Relief & Rehabilitation

Current rehabilitation practices fall short of fully restoring coordination functions after an injury. Even after surgical procedures performed to eliminate the apparent cause of low back, shoulder or knee pain, patients are still suffering. These pain patterns are the result of dysfunctional coordination sequencing among movement and postural support muscles. These are not addressed by surgery or conventional rehabilitation programs.

The information system governing coordinated movement, which is disrupted by acute or even sub-clinical injuries, does not automatically recover when the tissues heal. There is collateral damage to the coordination information system itself.

The result of this lack in our current medical rehab environment is that people do not recover fully from accident and injury. Sub-clinical injuries from childhood on are never addressed at all and accumulate over a lifetime to become disabilities and degeneration many years later. Such accumulated disabilities could very well be the main cause of the degenerative physical effects associated with aging.

What is missing in both conventional treatment and rehabilitation programs, as well as in alternative approaches such as yoga, pilates, chiropracty and acupuncture, is the reconnection or facilitation of the neuromuscular pathways prior to the conditioning phase of rehab. Neuromuscular Reprogramming provides solutions for chronic neuromuscular pain, scoliosis, and coordination and performance issues for athletes. It speeds up recovery from acute injury and has a valuable role to play in recovery from stroke and head injury.
When the correct alignment and functional coordination of the muscles supporting posture and movement is restored, aggravating and degenerating pressures on joints spaces and tendons are relieved, reliably reducing the ultimate reason for painful symptoms even in the case of bulging discs.

Even with conditions requiring surgery, NeuroMuscular Reprogramming is essential to restore function post-operatively. Doctors can remove the cause, physical trainers can build the muscle strength, but only NeuroMuscular Reprogramming sets up the correct functional alignment for people to benefit from the prescribed exercises.

*NMR is the Missing Link in the rehab process.*

**How Neuromuscular Reprogramming Works**

Developed over 40 years of study and application with an extensive client base, NeuroMuscular Reprogramming works with the body’s organizational intelligence to reprogram the motor patterns governing coordinated movement. It uses applied kinesiology - engaging a muscle to do a minor amount of work against an equivalent resistance - to assess the connectivity of the neural pathways and the functionality of muscle relationships and to cue the motor cortex for learning or restoring more efficient and easeful movement patterns.

Coordination patterns develop as preferred neural pathways that persist as memory stored in the cerebellum. These patterns governing coordinated movement are disrupted by accident, trauma, overuse, or misuse. The pathways are always available for restoration except in the case where the nerve supply is actually damaged. Even people in their 80’s and 90’s can restore neuromuscular “blind spots”, some of which have been dysfunctional for 30 years or more.

The reprogramming is accomplished by testing a series of muscles and muscle functions and then releasing, through a choice of advanced muscle release techniques, the muscle that is causing the inhibition by being stuck in a state of chronic contraction. The testing series is then repeated to challenge and anchor the functionality of all muscles involved.
NeuroMuscular Reprogramming wakes up the neural pathways disrupted by kinesthesia (sensory-motor amnesia). It works by taking the movement programs of the brain out of their automatic phase, where they are stored in the cerebellum, up to the motor cortex to consciously re-train the brain to sustain muscle tension at the appropriate levels both statically and dynamically. After that period of learning, it re-installs and stores those new action patterns and the new set points for static tonus back into the cerebellum.

Because the new learnings are facilitated with hands-on manipulation, the body learns much faster than with exercise alone, because touching adds additional sensory stimuli, which the body uses to re-program itself. The speed with which tissue quality changes, pain diminishes and function returns is astonishingly fast with this neuromuscular conversation approach to tissue work.

The Missing Link and A Valuable Adjunct To Any Form of Treatment

Structural disorganization and neuromuscular pain create a constant demand on energy resources and are a major distraction from the enjoyment of life. Clients with neuromuscular pain spend a lot of time and money on visits to doctors, acupuncturists, nutritionists, trainers and other healthcare practitioners looking for solutions. The discomfort affects their emotional relationships, mental concentration and ability to function.

Even healthy people have pain. The daily activities of an average healthy person are not good for the back. Sitting long hours in a car or at a desk involves compressive forces on the low back structures that have cumulative effects. An essential part of the health care system should be teaching proper biomechanics and education about necessary rehab practices.

The specificity of NMR is as unique as its ability to identify what’s not working and why. It investigates and identifies muscle relationships that are not predictable based on normal biomechanical patterns. Therefore it can get results where other techniques fail. It speeds up treatment results significantly, gives you tools for investigating ANY malfunctioning coordination patterns and correcting them immediately.
NMR is unique in the field of bodywork and physical therapy. It prepares the body to benefit from rehabilitative activities, teaches protocols for the most common issues found, lowers the frustration level for clients and gives them self help tools to use to promote healing.

The engagement of the client in the active learning mode achieves an exponential result compared to manipulation alone. Manipulation plus active engagement is the most effective approach to bodywork.

NeuroMuscular Reprogramming (NMR) should be the first course of treatment for patients presenting with muscle pain and dysfunction or recovering from an injury or operation.

NeuroMuscular Reprogramming (NMR) is the life work of founder and director, Jocelyn Olivier.