Dynamic Chiropractic

REHAB AND RECOVERY

The Art of Recovery: Three Critical Steps

Mario Fucinari, DC, CPCO, CPPM, CIC | DIGITAL EXCLUSIVE

WHAT YOU NEED TO KNOW

- Recovery of impaired function is not always a smooth ride. It requires rebuilding the entire body from the ground up.
- Restoration of the kinetic chain begins at the feet. The arches of the foot must be properly balanced and of optimal height to allow proper function.
- Next, get rid of the rust. Chronic subluxations lead to loss of nerve function and adhesions, which will alter function.
- Finally, no vehicle would be worth the investment if the engine did not run smoothly. Proper nutritional support and continued maintenance care help to achieve efficient function.

Restoring classic cars is challenging and requires specialized knowledge and appreciation of their beauty. Most consider it less of a mechanical skill and more of an art form. Likewise, the human body is a truly magnificent piece of engineering and design. Restoration is, first and foremost, an investment.

Helping our patients recover from an injury or ailment requires a unique blend of artistic intuition and mechanical know-how. Chiropractors require the appropriate science, art, and philosophies to restore our patients to optimal function.

When patients seek treatment at our office, pain is often the motivator to elicit care. We must understand that pain is a symptom of improper function. When we consider patient recovery, the physician and patient should work toward a common goal of improving the speed, quality, and ease of their daily living activities while addressing the cause of pain and not symptoms alone. Practical treatment goals must include the patient's lack of function to achieve successful restoration.

Educating patients away from the pain model and instead toward a functional mindset may bring

them to a realization of their genuine desire to achieve relief. We can only aid the patient in achieving optimal function by collecting information and analyzing the restrictions of their ability to perform activities within their environment. Proper consultation techniques will uncover patients' perceived limitations in their daily activities. If a physician only focuses on pain reduction, then the patient is left with a band-aid solution instead of a lifelong one.

A systematic approach to patient recovery is essential. Just as the outside of the vehicle is the first thing people notice, so is a patient's posture of great importance. The first step is to conduct a visual inspection. The body is like a two-sided coin. One side affects the other. A knowledgeable doctor will spot which muscles need to be strengthened and which antagonistic ones need to be loosened or stretched.

Posture is a result of the kinetic chain compensation from the ground up. We must also assess the kinetic chain from its foundation. The kinetic link principle describes how the human body can be considered a series of interrelated links or segments. One segment's movement affects the proximal and distal parts of the first segment.

In 1994, Kibler referred to the kinetic link system as a series of sequentially activated body segments.[1] In other words, one part or region of the body affects different elements proximally and distally. All functions occur through the kinetic chain, which begins from the ground up. A tree growing on the side of a hill will never grow straight. The human body must undergo compensation to optimize the center of gravity. Fix the foundation, and all else will follow.

Recovery is not a straight line. In the initial stage of treatment, patients should be educated and encouraged to slowly return to normal activities of daily living by exploring their limits through trial and error. Recovery is when basic movements are experienced, and alternative lifestyle modifications are learned with patient tolerance and safety in mind. Recovery of impaired function is not always a smooth ride. It requires rebuilding the entire body from the ground up.

Step 1: Restore the Chain

Restoration of the kinetic chain begins at the feet. The foot has three arches: the transverse, medial, and lateral arches. The arches add to the foot's flexibility to facilitate locomotor functions such as walking. The arches of the foot must be properly balanced and of optimal height to allow proper function.

A contractor would never eyeball a vital measurement, and neither should we. Precise measurements of the foot using data in microns from laser scans will yield custom foot orthotics. Just as prescribed eyewear compared to over-the-counter glasses is best, so are custom-manufactured foot orthotics from the laser scans.

Step 2: Get Rid of the Rust

Next, get rid of the rust. Chronic subluxations lead to loss of nerve function and adhesions, which will alter function. Bodywork would never be complete without repairing damaged materials. Individuals with chronic conditions often accommodate the gradual loss of strength and sensory changes. Patients may need to relearn motor skills lost over time.

Nikolai Bernstein, a 19th-century Russian neurophysiologist, pioneered the concept of multiple systems working together to create movement.[2] Normal neuromusculoskeletal function is required to accomplish daily tasks. This integrated system function allows the nervous system to return to homeostasis through manipulation.

Magill referred to measuring motor learning recovery by measuring and analyzing performance in three distinct ways: acquisition, retention, and transfer of skills.[3] Acquisition is the initial practice or performance of a new skill. The learning process in acquisition is accomplished through skilled therapeutic rehabilitation. Patients are guided through activities that enhance their strength, balance, and endurance to achieve movement.

Retention is the ability to demonstrate comprehension of the learned exercises at the end of one treatment session and again at the beginning of a new session on a different day without further training. The transfer of skills requires the performance of a task in activities of daily living practiced in rehabilitation (acquisition phase), which was different from the daily activity. For example, hip extension exercises would aid in the gait cycle.

A skill is not considered genuinely learned until that skill's retention and transfer are demonstrated. In other words, the goal of rehabilitation is for the patient to continue with a home-based exercise program consisting of the exercises learned in rehabilitation to achieve optimal daily living activities.

Step 3: Make Sure the Engine Runs Smoothly

Finally, no vehicle would be worth the investment if the engine did not run smoothly. The body cannot function optimally if the engine is not repaired and fine-tuned. Proper nutritional support and continued maintenance care help to achieve efficient function. Movement results from multiple systems working in synchrony.[4]

Not every patient is a muscle car, but our job as chiropractors is to restore and maintain that function through proper kinetic chain support, manipulation, rehabilitation, and continued maintenance of that marvel of engineering and design, the human body. You are a gifted mechanic using your training and skill to fix a broken machine. You must possess the science, art, philosophy, and willingness to do the job right. Your patients look to you to master the proper tools to aid them in the art of recovery.

References

1. Kibler WB. Clinical biomechanics of the elbow in tennis: implications for evaluation and diagnosis. *Med Sci Sports Exerc,* 1994;26(10):1203-1206.
2. Bernstein NA. *The Coordination and Regulation of Movements.* Oxford: Pergamon Press; 1967.
3. Magill RA. *Motor Learning and Control: Concepts and Applications. 9th Edition*. McGraw Hill; 2011.
4. Berstein NA, *Op Cit*.