

Taking a Functional Approach to YOUR Pain

In general, there are two broad classifications of pain:

1. Acute
2. Chronic

Acute pain is more often than not due to an injury that causes inflammation. The inflammatory process is how your body heals.

Chronic pain can be due to ongoing inflammation where an injury site is repeatedly irritated, some sort of disease process, such as rheumatoid arthritis, psychological factors or musculoskeletal imbalances.

Musculoskeletal imbalances are by far the most common, yet unfortunately the most poorly managed and understood.

The “key” to managing chronic musculoskeletal pain is by taking a functional vs structural approach.

In musculoskeletal medicine, there are two main approaches, structural and functional. In the structural approach, the pathology of specific static structures is emphasized; this is the typical orthopaedic approach that emphasizes diagnosis based on localized evaluation and special tests (e.g. X-Ray, MRI, CT etc).

The functional approach recognizes the interrelationships between other systems and structures, such as soft tissues, joints and how movement patterns are coordinated by the nervous system, rather than focusing on a single site of pathology.

While the structural approach is necessary and valuable for an acute injury or exacerbation, the functional approach is preferable when addressing chronic musculoskeletal pain.

A functional assessment generally takes into consideration structural pathology as this can affect function, however, it also includes a full body movement screen that identifies aberrant movement at all the major joints (e.g. an Overhead Squat), isolated joint range of motion, manual muscle testing and palpation.

A functional approach considers the regional interdependence of joints, where seemingly unrelated areas distal or proximal to the area of complaint may contribute to or be the source of the problem.

Treatment can consist of any tool(s) that will lengthen shortened soft tissue structures, strengthen weak muscles, mobilize joints and re-establish normal movement patterns, e.g. dry needling, deep massage, instrument assisted massage, joint manipulation and exercise.

Case history 1- Low back pain

Michael is a 38 year old computer tech who works at Microsoft. He developed insidious low back pain several months ago. He saw his MD who referred him for PT. He was given some exercises which help a bit. He decided to try chiropractic per the advice of a friend. After 8 visits, he discontinued care due to a lack of sustained progress. Michael came to see me at the advice of a co-worker. I had Michael perform an overhead squat assessment. His right foot turned out

and his knees caved in. Further examination (range of motion testing and muscle testing) revealed that these movement distortions were due to overactivity of the right hip flexors and right hamstrings. In addition, there was some weakness in his right gluteus maximus.

Michael's previous providers focussed on his low back at the site of pain. I treated his right hip flexors and hamstrings with dry needling, deep massage and performed SI joint manipulation. Michael was instructed to reinforce the treatments with foam rolling, stretching and some strengthening exercises.

He had immediate relief after the first treatment and resolution of his problem after 6 visits, which was commensurate with changes in his abnormal functional exam findings normalizing.

Comment: Michael's low back pain was secondary to overactivity of his hip flexors. This overactivity essentially turned off his right gluteus maximus muscle, resulting in compensatory tightening of his hamstrings and low back muscles, in order to stabilize his lumbar spine. Because prior treatment was directed at the compensatory/symptomatic area, as soon as Michael would sit or walk, his symptoms returned. By correcting the dysfunctional pattern demonstrated by the functional assessment, proper function was restored along with the resolution of his condition.

Case history 2- Plantar fasciitis

Jill is a 54 year old stay at home mom who gradually developed pain in her right heel. She saw a Podiatrist who recommended orthotics. After a month with no change she went to an orthopedist who did a cortisone injection. This gave her about 3 months of relief, until while on vacation where she was doing a lot of walking, her pain returned. This time she tried a course of PT, but after 7 sessions, she stopped because the relief was short-lived. Jill was referred to me by a friend.

The primary examination findings revealed decreased rotation bilaterally at her hips, weak right gluteus maximus and local right heel tenderness. Jill was treated with local dry needling to her heel, followed by myofascial release and dry needling, deep massage and stretching to her hips. This was reinforced with home exercises consisting of foam rolling, stretching and strengthening of the gluteus maximus.

Jill had immediate relief after the first treatment and resolution of her symptoms after 8 visits.

Comment: Dysfunction at Jill's hip was causing her foot to turn out. This caused asymmetric stress that affected the alignment at her hips and the joints above and below. When there is abnormal alignment, trigger points develop in the surrounding muscles along with joint dysfunction. Jill's prior treatment was directed at the secondary effects of her hip dysfunction-tight heel muscles. Because prior treatment was directed at the compensatory/symptomatic area, as soon as Jill would stand or walk, her symptoms returned. By correcting the dysfunctional pattern demonstrated by the functional assessment, proper function and alignment was restored thereby stopping the perpetual irritation of the soft tissues in her heel and resolving her condition.

The above cases are two of many patient experiences that happen regularly by following a functional approach

References

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