

## Should We Adjust the Painless Fixation?

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In order for movement to occur, our brain must send impulses to our muscles. Ages ago when I went to school, I learned that if we wanted to move our leg, areas four and six of the frontal lobes were stimulated and impulses were sent down efferent pathways to our leg muscles. But in recent years we have learned that the decision the brain makes is based on the information it receives from the peripheral system composed of proprioceptors in muscles, ligaments, joints, and skin, to name a few.

Therefore, any dysfunction of joints, capsules, muscles, etc., will send information to our brain which will process it and create a series of adaptive responses in the whole nervous and musculoskeletal systems. So function is based on proprioceptive input interpreted by our central nervous system. Today, it is accepted that the sensory system is intimately tied up with the motor system. Our central nervous system and our musculoskeletal system are one functional unit. Every active movement that we perform is affected by information coming from our peripheral structures. The eventual quality of movement performed by our bodies first depends on the information from the joints, muscles, ligaments, skin, etc., that reaches the sensory portion of the parietal lobe which is the highest motor level in our cortex. From the parietal lobe the information is transferred to the frontal lobe and then along efferent pathways and movement occurs. The movement eventually becomes automatic on a subcortical basis, so we don't have to think about it (walking, handwriting, etc.) This information comes from a very prominent medical neurologist by the name of Vladimir Janda with whom I recently spent some time. He has spent some 30 to 40 years studying the muscular system from a clinical point of view and admits that in the treatment of musculoskeletal problems we should first treat the dysfunctional joints and then pay attention to the muscles.

Changes of proprioceptive input from joints, for example, will send altered information to the central nervous system causing us to move in a different way and eventually stress the joint. Altered proprioception from a chronic tight muscle will affect the range of joint motion and, as in joints, compensatory hypermobility will occur. While a painful facet joint or active trigger point will probably have a greater effect on our central nervous system, a painless fixation or latent trigger point or a chronically tight muscle will also have an adverse effect.

So should we adjust a painless fixation? If the fixation is not fused and presents an end-feel that allows movement, by all means it should be adjusted. Just like a latent trigger point, it is adversely affecting our central nervous system which is responding with altered function.

Is it any wonder why a person bends over and suddenly has pain? It is seldom the last movement that was the cause. A major cause lies with the altered impulses over time from receptors in dysfunctional tissue. Dr. Janda feels that this concept helps to validate chiropractic with regards to musculoskeletal involvement.

This concept explains why, in order to treat a musculoskeletal problem, we have to look at the total motor system. The dysfunctional joint represents a very important source of altered stimulation to the central nervous system, but so do muscles. In future articles, I will be discussing the importance of analyzing and treating muscles, especially chronic tight muscles which are

responsible for the adjustment that "doesn't hold" or the condition which never completely responds until the muscle factor is taken care of.

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Editor's Note:

Dr. Hammer will conduct his next soft tissue seminar on May 1-2, 1993 in Salt Lake City, Utah. You may call 1-800-359-2289 to register.

Dr. Hammer's book, *Functional Soft Tissue Examination and Treatment by Manual Methods: The Extremities*, is now available. Please see Preferred Reading and Viewing List on page xx, Part #T-126 to order your copy.

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