## Whiplash

By: John F. Barnes, PT

We have all experienced or treated patients whose symptoms after a whiplash accident far exceed what could reasonably be explained by the velocity of the accident. Full-blown symptoms have been frequently seen at automobile speeds below 10 to 15 mph.

Most victims of even relatively minor motor vehicle accidents usually describe a sense of detachment and shock. The major symptoms of the whiplash may not appear for 48 hours and then may progressively worsen for many days, weeks or even months despite extensive care.<sup>1</sup>

In both the forward and backward motions involved, the front of the brain (which has the consistency of well-set Jell-O) slides forward and impacts against the rough and jagged edges of the eye orbits. The orbito-frontal areas are particularly susceptible to hematomas, contusions, and intercerebral hemorrhages. Particularly if the head is turned to either side at the impact, a phenomena called shearing may occur.

Psychoneuroimmunology research implies that "every cell in the body can communicate with every other cell." The reason that myofascial release and myofascial unwinding have been so effective with whiplash victims and other post traumatic injuries may be explained by the fight/flight/freeze response developed by Dr. Peter Levine.<sup>2</sup>

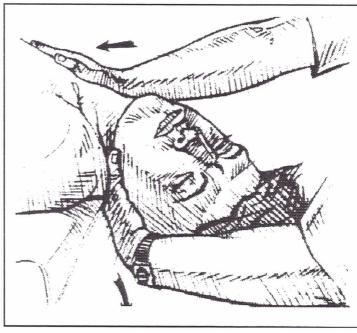
He postulates that the fight/flight/freeze response is seen in animals in response to life-threatening experiences. In other words, the preyed upon animal will flee or attempt to fight, but if run to the ground will enter a freeze response where it assumes a state of immobility while physiologically still manifesting high levels of activity of both the parasympathetic and sympathetic nervous systems.<sup>2</sup>

Myofascial release and myofascial unwinding release the contracted tissue, the tissue memory, and allows healing to commence. Dr. Levine goes on to say that if the animal survives the attacks, it will go through a dramatic period of discharge of this high-level autonomic arousal through the motor system. This discharge involves trembling, profuse sweating and deep breathing. This type of discharge is frequently seen after a deep myofascial release, followed by substantial improvement.

In the case of a motor vehicle accident, a holding pattern develops to protect the body against impact. As a result of the freeze response, this holding pattern is maintained indefinitely, manifesting sustained muscular contraction with resultant myofascial pain and tightness.<sup>1</sup>

This explains why traditional therapy's focus on symptoms is not enough for a complete resolution of the problem. Myofascial release and myofascial unwinding release the muscular contractions, the myofascial restrictions and the holding patterns maintained by the "freeze response."

The fight/flight/freeze response answers many questions we therapists encounter with our trauma victims.



Myofascial Release can resolve the instinctual "bracing patterns" that impede progress.

References

1. Robert Scaer, MD, Bridges Magazine, Observation on Traumatic Stress, The Whiplash Model.
2. Levine, P., Walking the Tiger, Healing Trauma Through the Body.

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