

The Fender Bender on Memory Lane
(Soft tissue Injuries, part one of a three part series)

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Why is it that years after a car accident, pain and stiffness persist? Ever notice that people involved in an "Abrupt Movement Injury" like whiplash from a car accident or slip and fall experience stiffness and/or pain for days or years after the incident? Can anything be done to help?

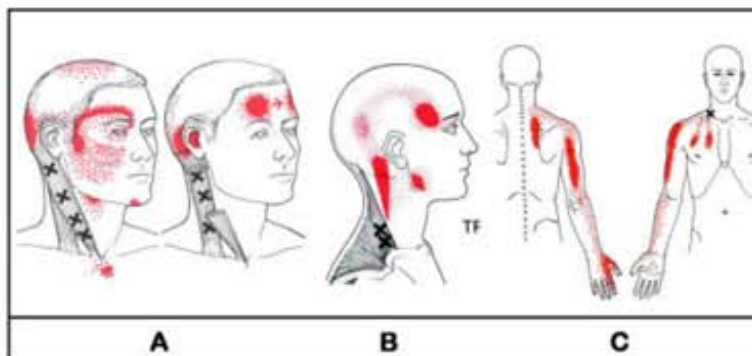
In this three part series, the therapists at MyoRehab provide an explanation and a drug-free remedy for areas of the body most commonly injured. We begin with upper back, neck and head pain and stiffness.

Pain following a car accident or a slip and fall is always accompanied by stiffness. The simple explanation is "chemistry". When our bodies are exposed to a sudden motion, an equal and opposite reaction occurs in our muscles to maintain balance.

The abrupt movement produces an abrupt response in the form of a spontaneous reflex muscle contraction. In the presence of the forced movement caused by the weight of our heads trying to continue forward (inertia), damage occurs to the contracted muscle and connective tissue (fascia) in our necks.

Our bodies work to repair the injury by first sending chemistry (inflammatory mediators) to the damaged tissue. The chemicals responsible for repair also produce pain. The pain signal, in turn, causes a response from our nervous system allowing the chemicals of sustained muscle contraction to flood the injured area. Initially, this is a good thing.

The resulting sustained contraction (Functional Splinting) allows muscle and connective tissue to escape further injury while healing. The problem occurs when injured muscles develop Myofascial Trigger Points (MTrPs).



A MTrP is a hypersensitive, self-sustained contraction knot in muscle that is accompanied by shortening in the length of the muscle called a taut band. When the knot is stimulated by movement or pressure, pain is referred through pathways in the nervous system in predictable patterns, usually away from the MTrP. The taut bands produced by MTrPs and the chemicals they trap are

responsible for the stiffness and produce what we call "muscle memory".

MTrPs are frequently overlooked and often misunderstood as a source of musculoskeletal

pain. This is best illustrated by results from two studies involving nearly 400 patients seeking medical intervention for pain. MTrP were identified as the source of pain as much as 93% of the time.

Being overlooked and misunderstood results from the fact that MTrPs refer pain away from the source. When searching for the "problem" in the referred pain zone, one finds nothing to treat. This all too often leads to the assumption that the pain must be "in your head". Let's take a closer look.

The muscle frequently injured in an Abrupt Movement Injury of the neck is the sternocleidomastoid (SCM). This is the muscle that forms the "V" in the front of the neck (Illustration A). In all illustrations, an 'X' represents a contraction knot (MTrP) most likely to form. The red color represents referred pain. Notice the lack of pain at the 'Xs'.

The SCM turns our heads, brings our chins to chest and provides a checkrein action (spontaneous reflex contraction) that prevents disaster during a whiplash incident. The SCM is most responsible for headaches and stiffness that continue for days or years after an accident.

The upper trapezius (Illustration B), also involved in head turning, is injured during whiplash and produces headaches and stiffness. The scaleni muscle group (Illustration C) is involved in bringing chin to chest and side bending the neck. It too is injured during whiplash but produces referred pain and stiffness into the upper back, chest and arms.

A person injured in a car accident often waits for the pain to "go away" on its own. The pain may "go away" but contraction knots (MTrPs), now in a temporary state of latency, remain. Latency does not last forever. The simple act of reaching forward too fast or sitting at a computer for hours can reactivate the pain and stiffness of latent contraction knots.

Manual Trigger Point Therapists trained and certified by the American Institute for Myofascial Studies, LLC are highly effective in the skillful identification and permanent elimination of pain and stiffness needlessly suffered for years.