



Injury Briefing

A review of the latest studies from Dr. Michael D. Berry.

Widespread Pain Common in Women with Whiplash

If you think whiplash is a simple neck injury, think again. Research shows whiplash can make patients more prone to pain in other parts the body, too.

A study from Sweden shows how whiplash can trigger pain and sensitivity throughout the body.

The study included 25 women with whiplash and ten women without the disorder. Researchers strapped participants' arms and legs with inflated, computerized cuffs that applied pressure over ten-minute period. Patients' pain intensity was tracked continuously throughout the test. Those with whiplash were more sensitive to pain in their arms and legs than the control group.



After the cuff tests, researchers injected a saline solution into the tibialis anterior muscle, which is located on the side of the tibia in the leg. Patients drew a map of where of they perceived pain in the leg after the injection. The control group reported three areas of referred pain on average, while the whiplash group reported 16 areas of referred pain.

So what's causing this hypersensitivity to pain?

A traumatic injury sets off a chain reaction in the body. Damaged, inflamed tissues send pain signals to the brain. The brain reacts by activating the rest of the central nervous system and telling the tissue to contract to prevent injury. This can lead to muscle imbalances and overcompensation in the muscles surrounding the injury.

Sometimes the central nervous system kicks into overdrive, making the entire body highly sensitive to any form of pain. Overtime, the central nervous system becomes incapable of properly processing pain stimuli. This process is called central sensitization. It can lead to widespread pain in places of the body that may be far away from the original injury.

Chiropractors are trained to spot the signs of central sensitization, whether it is occurring in a patient with whiplash or another musculoskeletal injury. Doctors of chiropractic can work with patients to break the cycle of pain through drug-free treatments.

Reference:

Lemming D, et al. Widespread pain hypersensitivity and facilitated temporal summation of deep tissue pain in whiplash: an explorative study of women. Journal of Rehabilitation Medicine 2012; 44(8): 648-57.