

The Upper Crossed Syndrome:

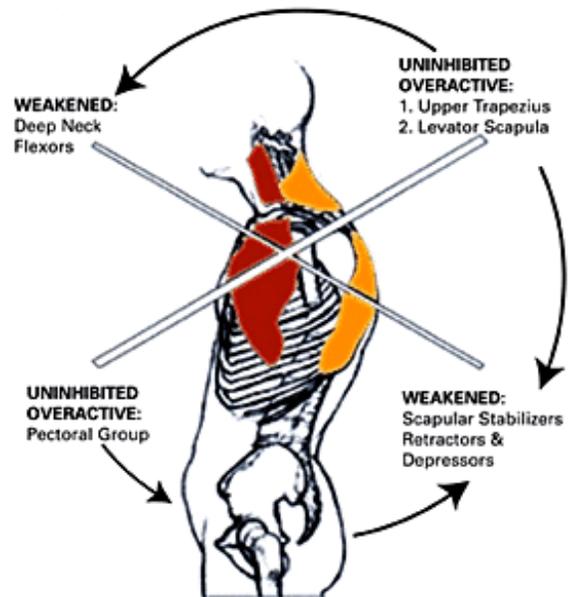
A common underlying cause of neck pain, jaw pain, headaches and shoulder problems.

The statistics on back pain are staggering. About 80% of the population (243 million people) will have a bout of debilitating back pain at some point in their lives. Of those 243M people, 60-89% of them will have a recurrence within one year, 15-25% will have symptoms for at least an entire year, and about 66% can expect to have some symptoms every year. The economic cost of back pain in the US is conservatively estimated to be **\$90 billion**. Back pain is the second most common reason for doctor visits (upper respiratory infections are #1).

Originally defined in the late 80's by Vladimir Janda, MD, DSc and Gwendolen Jull PT, PhD, two heavy weights in the manual medicine and rehabilitation world, the Upper Crossed Syndrome (UCS) is one of the most common underlying causes of acute and chronic neck pain, headaches, shoulder problems and jaw pain (TMJ).

Unfortunately UCS, much like cardiovascular disease, is a "silent" disorder. It often **takes years to develop** and initially causes no symptoms. Symptoms become apparent only after UCS has made **significant** changes to the mechanics of the upper back, neck, shoulders and jaw. UCS, as shown in the picture to the right, is due to weak deep neck flexors and scapular stabilizers and over-active, tight upper trapezius and pectoral muscles.

UCS is most commonly seen in those who have desk jobs or those who sit for a majority of the day, but UCS is not exclusive to this group. **Humans are designed to stand and walk.** Standing and walking engages the deep neck flexors and scapular stabilizers and lengthens the pectoralis and upper trapezius. Sitting with forward head posture, however, tightens and shortens the pecs and upper trapezius and inhibits, or turns off, the deep neck flexors and the scapular stabilizers. This *paradoxical muscular imbalance* is due to *Sherrington's Law* of reciprocal inhibition which states that when one muscle is shortened or tightened its opposite muscle relaxes. For example, in the upper arm, when the biceps contract—the triceps relax and vice versa. If the biceps were always tight the triceps could never be strengthened. The picture to the right demonstrates the reciprocal relationships in the neck and upper back areas.



OVER

The Upper Crossed Syndrome

Continued

Though UCS is a “silent” disorder, it does give us some visual cues. Most people who have UCS have forward head posture (the opening of the ear is in front of the shoulder), an increased curve in the upper back, “winged” shoulder blades and forward, rounded shoulders.

The changes in muscle length and strength from **UCS creates dramatic destructive forces in the neck, shoulders and jaw** affecting the joints, discs, connective tissues and muscles causing rigidity, instability and ultimately pain.

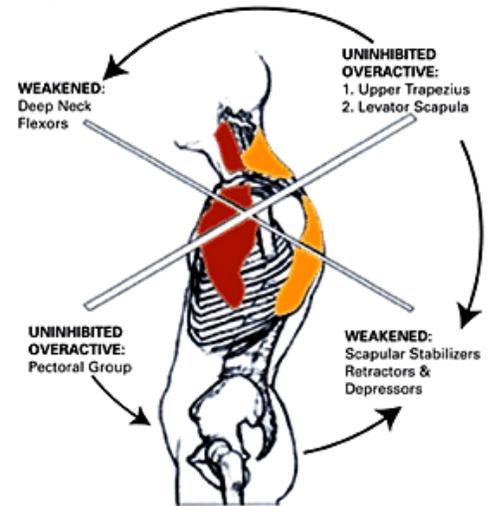
(Eventually *these changes affect the entire body* creating the “lower crossed syndrome” as well.)

Every move—every turn of the head, every movement of the arm, every chew—that someone makes who has UCS damages their neck, shoulders and jaw. Those who have UCS often develop pain “out of the blue,” gradually over weeks or months, or while doing something completely mundane—like while looking over their shoulder or tossing something in the trash.

Due to that pesky Sherrington’s Law of reciprocal inhibition, **it is impossible to strengthen the deep neck flexors and scapular stabilizers without chiropractic and rehabilitative intervention** due to the degree of tightness of the pectorals and upper trapezius and the rigidity of the spine.

The good news is that **UCS is easy for us to identify and can be corrected with time and a conscientiously applied program of chiropractic and rehabilitative care.** Over time, manipulation, stretching and progressive exercise reestablishes normal movements and normal muscular length and strength. Most people with UCS should plan on **three to four months** of care including chiropractic, stretching and exercise to correct their UCS.

Keep in mind that symptoms are often very misleading. UCS develops over a long period of time without causing pain and pain usually vanishes long before the underlying imbalances are corrected.



Suggested preliminary stretches. Hold stretches for 30 seconds—3 repetitions.

