

UPPER CROSSED SYNDROME

Medical and Athletic Professionals are aware of Upper Crossed Syndrome (UCS). See graphic below.

Reducing compensation patterns associated with UCS automatically reduces several associated issues. Common issues associated with or caused by Upper Crossed Syndrome are neck issues, loss of cervical curve, rotator cuff issues, frozen shoulder, thoracic kyphosis, S/C and A/C joint issues, low back pain, facet syndrome, abdominal oblique strains, and lower abdominal injury (Sports Hernia).

Using antiquated uni-planar correction protocols are slow going and temporary at best. ROTEXMotion offers an advanced multi-planar method of correcting compensation patterns that contribute to UCS.

ROTEXMotion is a total body system of exercise, which actively releases the tight muscles that contribute to UCS in all planes of movement at once. It also simultaneously strongly activates the opposite muscles, reciprocally releasing elements of UCS. This is not only a quicker way to break UCS compensation patterns, but provides more permanent results.

The prime postural defects of Upper Crossed Syndrome are protracted shoulders and forward head position, internal rotation of the shoulders, and elevated scapulae. These are all caused by overactive, short, and/or hypertonic shoulder/neck flexors, internal shoulder rotators (mainly latissimus dorsi), and levator scapulae/upper trapezius. These are complicated by relatively weak and inhibited rhomboids, lower trapezius, and external shoulder rotators.

1 – The pelvis and hips are the transmission of energy from the lower to upper body. It is important to balance the hips, pelvis and core of the body before undertaking the work of reducing Upper Crossed Syndrome. ROTEXMotion Internal Hip Rotation provides strong activation and isometric strengthening of all gluteals, hamstrings, lower abdominals and pelvic floor muscles. This has been shown from extensive electromyogram study of superficial muscles, vaginal probe EMG, and diagnostic ultrasound.

<https://vimeo.com/311791062>

2 – Releasing fascial tension in the lower body is key to ultimately reducing Upper Crossed Syndrome. ROTEXMotion Multi-Plane Squat, more so than any exercise which we are aware, releases tightness of fasciae throughout the body. Locally, it strongly activates all the anterior leg muscles responsible for balance and reciprocal inhibition of the calves, and for releasing tension of the Achilles. Globally, it is evident that the fascial spiral line is balanced and released from the feet and ankles, through the hips, through the thoracolumbar fascia, into the opposite shoulder, when this exercise is performed.

<https://vimeo.com/311791666>

3 – Releasing the tension in and around the thoracolumbar fascia is the most overlooked element of reducing Upper Crossed Syndrome. ROTEXMotion External Shoulder Rotation with Hip Centration provides a release of tension on the thoracolumbar fascia (TLF), which contributes to release of Lower Crossed Syndrome and Upper Crossed Syndrome, simultaneously. Once the thoracolumbar is released through this exercise, it makes it much easier to release the latissimus dorsi, most often the major contributor the UCS. Once the lat is released, it makes it easier to release other contributors to UCS, such as protraction and elevation of the shoulder.

<https://vimeo.com/311793070> (External Shoulder Rotation only)

<https://vimeo.com/328820923> (External Shoulder Rotation with Hip Centration)

4 – Serratus Anterior is the muscle that has the most to do with shoulder elevation. If it is weak and inactive, other shoulder elevators such as upper trapezius and levator scapula will become overactive and facilitated. Strongly activating the serratus anterior is paramount to reducing UCS. Diagnostic ultrasound shows the serratus anterior contracts to its maximum capacity during this exercise.

<https://vimeo.com/308762480>

<https://vimeo.com/331192778> (3D animation of the exercise)

5 – Strongly activating and strengthening the posterior shoulder rotators inhibit the latissimus dorsi and synergists, which helps pull the glenohumeral joint back to a more neutral position. This exercise provides a dual function, both to provide external shoulder rotation and shoulder depression, two main elements of correcting Upper Crossed Syndrome.

<https://vimeo.com/308765890>

<https://vimeo.com/331192549> (3D animation of the exercise)



Upper Crossed Syndrome

(Forward Shoulders and Head)



Short/Overactive Muscles

Pectoralis Major, Anterior Deltoid.....▶

Pectoralis Minor, Levator Scapulae,.....▶
Upper Trapezius

Sternocleidomastoid, Rectus Capitus.....▶

Long/Weak/Inhibited Muscles

Rhomboids, Infrapinatus, Teres Minor,
Posterior Deltoid

Serratus Anterior, Lower Trapezius

Longus Capitus, Longus Coli,
Scalenes

In Rotation:

Latissimus Dorsi, Teres Major,.....▶
Subscapularis, Anterior Deltoid

Infraspinatus, Teres Minor,
Posterior Deltoid

Associated Strain, Pain, Injury Patterns:

- Upper back and shoulder muscle strains and pulls
- Headaches (*mechanical types—stress and tension*)
- Thoracic Outlet Syndrome
- Rotator cuff impingement
- Rotator cuff muscle tears

Joint Dysfunctions:

- Hyper-kyphosis of the thoracic spine
- Sternoclavicular and acromioclavicular (*both jammed due to forward position of clavicle*)
- Cervical facets
- Upper thoracic spine hypo-mobility
- Glenohumeral (*cannot rotate properly in all directions*)

Movement or Performance Dysfunctions:

- Any actions which involve the synchronization of the legs and shoulders (*running, throwing, swinging, shooting, swimming, etc.*)
- Overhead actions
- Pushing, and especially, pulling movements (*decreased ability to generate power through the arms and shoulders*)
- Inability to stabilize the upper thoracic and cervical spines
- Inability to create Super Stiffness to create maximum centrifugal force