

LOWER CROSSED SYNDROME

Medical and Athletic Professionals are aware of Lower Crossed Syndrome (LCS). See graphic below.

Reducing compensation patterns associated with LCS automatically reduces several associated issues. Common issues that are associated with or caused by Lower Crossed Syndrome are stress incontinence, low back pain, facet syndrome, abdominal oblique strains, hamstring strains, patellofemoral pain syndrome, anterior cruciate ligament 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 LCS.

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

The prime postural defect of Lower Crossed Syndrome is anterior pelvic tilt caused by overactive, short, and/or hypertonic hip flexors and low back paraspinal muscles. This is complicated by relatively weak and inhibited gluteals, hamstrings, lower abdominals and pelvic floor muscles.

1 – 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 – 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 when this exercise is performed.

<https://vimeo.com/311791666>

3 – ROTEXMotion Pelvic Floor Exercise provides the same effects as Internal Hip Rotation, but an even more excellent isometric contraction of the Pelvic Floor muscles. Using internal hip rotation that must be overcome by the pelvic floor muscles, a stronger contraction is required to produce a posterior pelvic tilt.

<https://vimeo.com/311798108>

4 – All exercises above require strong contraction of weak and inhibited ancillary muscles that contribute to Lower Crossed Syndrome – Gluteus Medius, Adductor Magnus, Semimembranosus, Tensor Fascia Lata (in internal rotation), Internal Oblique, and Transverse Abdominis.

5– 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. As tension is released in and around the TLF, anterior pelvic tilt is diminished and the pelvis is allowed to return to a more natural, neutral position.

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

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



Lower Crossed Syndrome

(Anterior Pelvic Tilt; Lumbar Hyper-Lordosis)



Short/Overactive Muscles

Rectus Femoris.....
 Psoas Major.....
 Tensor Fascia Lata.....
 Erector Spinae.....
 Short Adductors.....
 Gastrocnemius, Soleus.....

Long/Weak/Inhibited Muscles

▶ Hamstrings, Gluteus Maximus
 ▶ Gluteus Maximus
 ▶ Gluteus Medius (in abduction)
 ▶ Rectus Abdominis
 ▶ Gluteus Medius (in abduction)
 ▶ Tibialis Anterior, Tibialis Posterior

In Rotation:

External Oblique..... ▶ Internal Oblique, Multifidus,
 Transverse Abdominis
(all same side)

If Hip External Rotation:

External Oblique..... ▶ Gluteus Medius, Tensor Fascia Lata,
 Adductor Magnus, Semi-membranosus
(all weak in internal rotation)

Piriformis/External Hip Rotators..... ▶ Gluteus Medius, Tensor Fascia Lata,
 Adductor Magnus, Semi-membranosus
(all weak in internal rotation)

If Pronation:

Peroneus Longus..... ▶ Tibialis Posterior, Tibialis Anterior

Associated Strain, Pain, Injury Patterns:

- Anterior and Medial Knee
- Low Back
- Hamstrings
- Sciatica
- S-I Joint

Joint Dysfunctions:

- Talus
- Tibiofibular (distal and proximal)
- Tibiofemoral
- Hip
- Sacro-Iliac
- Lumbar Facets

Movement or Performance Dysfunctions:

- Inability to stabilize hip, pelvis and lumbar spine during dynamic movement
- Inability to create Super-Stiffness of trunk to provide maximum centrifugal force