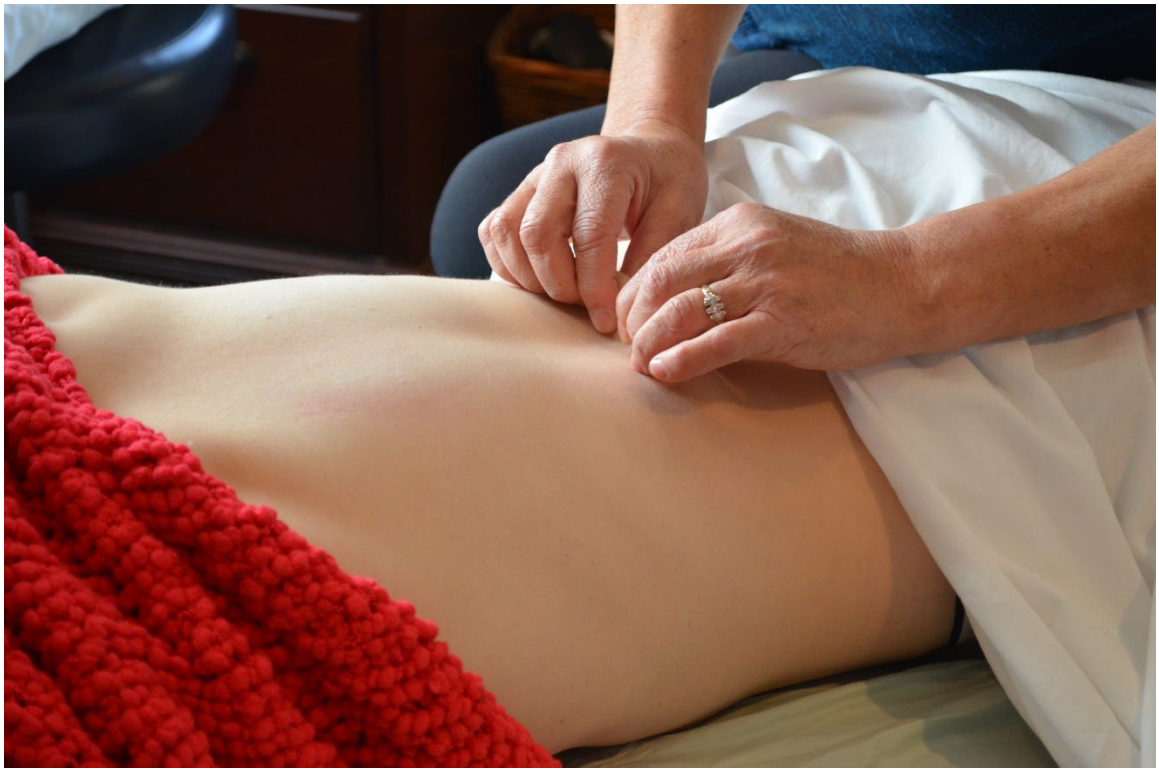
Getting Grounded – Myofascial Release Techniques to Balance the Pelvis and Low Back



Presented by:
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Getting Grounded – Myofascial Release Techniques to balance the Pelvis and Low Back

In this 7-hour class the participant will learn myofascial release techniques and principles targeted to improve balance and symmetry of the pelvis and low back.
Participants will engage in a laboratory style workshop gaining evaluation and assessment tools, hands-on instruction, and application of MFR techniques and principles to improve balance and symmetry of the pelvis and low back.

Course Schedule:

8:30-9:30 Introduction to class and Postural Evaluation Lab

9:30-10:15 Cross Hand Releases 1-3

10:15-10:30 Break

10:30-11:00 Cross Hand Releases 4-5

11:00-12:00 MFR Techniques 1-4

12:00-1:00 Lunch on your own

1:00-2:00 Soft Tissue Mobilizations 1-5

2:00-3:00 Myofascial Mobilizations 1-4

3:00-3:15 Break

3:15-4:00 Muscle Energy Techniques 1-5

4:00-4:30 Q&A and Course Wrap Up

Getting Grounded – Myofascial Release Techniques to Balance the Pelvis and Low Back

MFR Techniques: Pages 10-12

1. 3 Step Lumbosacral Decompression Technique
2. Bilateral Leg Pull in Supine (Spring for Upslip)
3. Bilateral Leg Pull in Prone
4. Myofascial Diagonal Release of Pelvis in Supine

Cross-Hand Releases: Pages 13-16

1. ASIS to Anterior Thigh to Foot
2. Ischial Tuberosity to Posterior Thigh to Foot
3. Lateral Trunk Release with Spring for Upslip
4. Paraspinal/Lumbosacral Junction Release
5. Ischial Tuberosity Release in Sitting

Muscle Energy Techniques: Pages 16-17

1. Anterior Pelvic Rotation
2. Posterior Pelvic Rotation
3. Upslip
4. Downslip
5. Adductor Squeeze

Myofascial Mobilization: Pages17-19

1. Psoas
2. Quadratus Lumborum
3. Piroformis
4. Adductors (Obturator Ext.)

Soft Tissue Mobilizations: Pages19-20

1. ITB
2. Erector Spinae
3. Hamstrings
4. Quads
5. Skin Rolling/Fascial Snap

Postural Evaluation

The process of postural evaluation and determination of soft tissue integrity is imperative to the question of "where do I start?" There is no way to assess the body unless you are willing to look at it and touch it.

The process of evaluation should not be a passive one. You cannot expect to view the body as the dynamic being it is if it is only seen lying supine on the table. We spend most of our lives in gravity and therefore part of the assessment must be done in gravity, both statically and dynamically.
When you are able to assess the patient as it stands, sits, walks, and performs ADL's you will not only have a clear picture of where restrictions lie, you will also view compensatory patterns and habits.
It is important to watch as the patient performs the activity that exacerbates their symptoms. If picking up a laundry basket is the culprit, watch as the patient reproduces this function.
We need to "get over" the old view that we are somehow inconveniencing our patients by asking them to change positions frequently or become active partners in their assessment and treatment.
True healing can only take place when you are both willing to work at it. Entering your initial visit with openness toward partnership will give the patient a sense of control and will teach them to be invested in their progress. Your patients will thank you for taking the time to watch them and listen to them.

A good "homework" assignment is to spend some time "people watching." My favorite place is the airport because not only are you able to evaluate gait patterns and postures, you are also able to see compensatory strategies as people lug, push and pull on their luggage and children.
You can be a good observer by noticing the overall picture with an "open" focus, and then "zeroing in" on the details of the picture by using a "closed" focus.
Note the overall posture and body language by stepping back and viewing where the body is in space and how it moves through space. Begin to notice where the "glitches" are in their movement and what appears asymmetrical within the general framework.
Now "zero in" on those glitches and asymmetries to determine where restrictions may lie.

When evaluating in the clinic you have the added bonus of being able to see what is underneath layers of clothing and feel the tissue to determine tissue integrity and mobility.

As above, you begin by looking at the overall picture with an "open focus" to determine overall body posture and symmetry. You then "zero in" on the details by using a "closed" focus.

The “zeroing in” process involves palpating bony landmarks to determine body symmetry, and making use of your proprioceptive skills to determine tissue mobility and integrity.

Important landmarks that may be used include:

1. ASIS’s
2. PSIS’s
3. Iliac crests
4. Greater Trochanters
5. Patellae
6. Position of rearfoot, midfoot, and forefoot – i.e. calcaneal position, subtalar neutral, and position of metatarsal/tarsals
7. Lateral angle of trunk
8. Arm position in space
9. Sternoclavicular joints
10. Acromioclavicular joints
11. Position of scapulae and palpation of inferior angle of scapulae
12. Presence or absence of appropriate curves at the spinal junctions
13. Overall spinal symmetry
14. Angle of head as it sits on the neck
15. Facial asymmetries

Assessing Tissue Mobility and Symmetry:

After establishing the overall body position in space and postural symmetry by the above observations you will have some clues as to where tissue may be restricted and where “glitches” may be present.
You can test out your theories by placing a hand where you think a restriction may be and test the tissue mobility in each direction.
You begin by allowing your hand to sink into the tissue and then exert slight pressure to “pick up the slack” in the tissue. Feel the end range in each direction (i.e. North, South, East, and West)

Normal tissue has an elastic end feel.

This means that after you have “picked up the slack” in the tissue, normal tissue has a slight “give” to it.
If you feel your hand come to a dead stop in the end range or if you feel a resistance to movement, that indicates a fascial restriction.

Normal tissue is never hard, hot, or painful.

If you touch an area that is hot, hard, or painful, you can assume that this is an area of restriction!

Ongoing Assessment:

As you begin treating your patient it is important to continually "check in" on the feel of their tissue and assess the changes in their posture and movement. This will allow you to assess their progress and determine "where to go next" in their treatment program.

Assessment of the Fascial Pelvis

When assessing the integrity of the pelvis, the following should be considered:

- Palpation of the ASIS's
- Palpation of the PSIS's
- Palpation of the Iliac Crests
- Palpation of the Pubic Symphysis
- Palpation and observation of leg length in long sitting and supine
- Leg length comparison with hips and knees in flexion. Observation at femur and tibia
- Forward Bending Test
- SI Spring Test
- Integrity of fascial system throughout the pelvic floor
- Compensatory asymmetry above and below the pelvis
- Dural Tube symmetry and mobility.

When naming a lesion or dysfunction, we name the hypomobile side.

The following is a summary of the most common pelvic asymmetries with the most common compensations.
(All lesions will be named right sided for ease of description.)

<u>Right Anterior Pelvic Rotation:</u>

- Right ASIS is lower than the left.
- Right PSIS is higher than the left.
- Iliac crests are level. (Usually)
- Right lower extremity is longer in supine and shorter in long sitting.
- The right PSIS moves first with forward bending test.
- There is decreased mobility with spring testing on the right.

Common compensatory asymmetries: When the right ilium is rotated in an anterior direction, the femur drops down making that leg functionally longer. The right knee will position in valgus and the right foot will be pronated.

<u>Right Posterior Pelvic Rotation:</u>

- Right ASIS is higher than the left.
- Right PSIS is lower than the left.
- Pubic symphysis is higher and more prominent.
- Right lower extremity is shorter in supine and longer in long sitting.
- The right PSIS moves first with forward bending test.
- There is decreased mobility with spring testing on the right.

Common Compensatory asymmetries: When the right ilium is rotated in a posterior direction the femur will rode superiorly making the left functionally shorter. The right knee will position in varus and the right foot will be supinated.

Right Upslip:

- Right ASIS is higher than the left.
- Right PSIS is higher than the left.
- Iliac crest is high on the right.
- Pubic Symphysis is high on the right.
- Right lower extremity is shorter in supine and long sitting.
- The right PSIS moves first with the forward bending test.
- There is decreased mobility with spring testing on the right.

Common compensatory asymmetries: There will be lateral shortening on the right. Compensatory patterns vary greatly.

Right Downslip:

- Right ASIS is lower than the left.
- Right PSIS is lower than the left.
- Iliac crest is low on the right.
- Pubic symphysis is low on the right.
- Right lower extremity is longer in supine and long sitting.
- The right PSIS moves first during the forward bending test.
- There is decreased mobility with spring testing on the right.

Common compensatory asymmetries: There will be shortening on the left side. Compensatory patterns vary greatly.

Evaluation Form for Pelvic Assessment

Standing Assessment:	**Right**	**Left**
ASIS in RCS		
ASIS in STN		
PSIS in RCS		
PSIS in STN		
Iliac Crest height		
Pubic Sym. Position		
Forward Bending Test Step Test		
Knee Orientation (valgus, varus, hyperextension)		
Foot Orientation (pronation/supination)		
Sitting Assessment:		
ASIS sitting		
PSIS sitting		

Supine Assessment:	**Right**	**Left**
ASIS		
PSIS		
LL Supine		
LL Long sitting		
Hook Lying Tibial height		
Hook Lying Femur length		
Femoral Torsion		
Tibial Torsion		
Actual Leg Length Discrepancy?		
Spring Test		
Ilium Compression		
Ilium Distraction		

Impression:

Treatment Plan:

Myofascial Release Techniques:

Pelvic Floor Release with Lumbosacral Decompression: (3 Step Lumbosacral Decompression)

Lumbosacral Decompression:
The patient is in a supine position:
This is completed in three stages. In all three stages the therapist's operating arm is placed between the patient's legs with the operating hand cradling the sacrum. The therapist's elbow rests on the table.
At each stage the therapist is applying gentle traction to the sacrum in a caudal direction.
At each stage the barrier must be engaged and the therapist must wait at least 90-120 seconds for the release to begin.
Do not force through the barrier but gently maintain your traction and follow the sacrum three dimensionally as it releases.

1. In the first stage the supporting hand is placed under the lumbar spine close to the Lumbosacral junction.

2. In the second stage either the patient or the therapist "gaps" the ilium by applying gentle medial pressure on the anterior ilium.

3. In the third stage the therapist places the supporting hand on the pelvic floor just superior to the pubis and directs a counter pressure in a cephalad direction.


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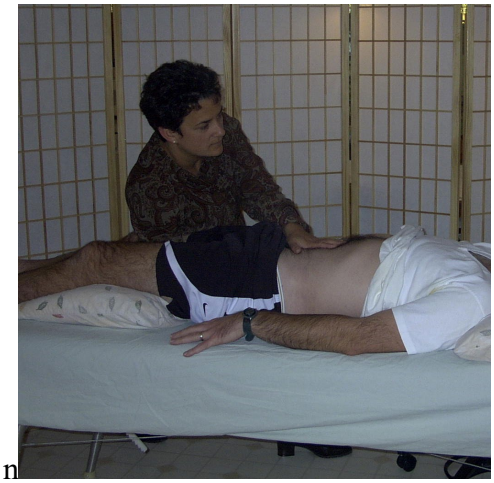
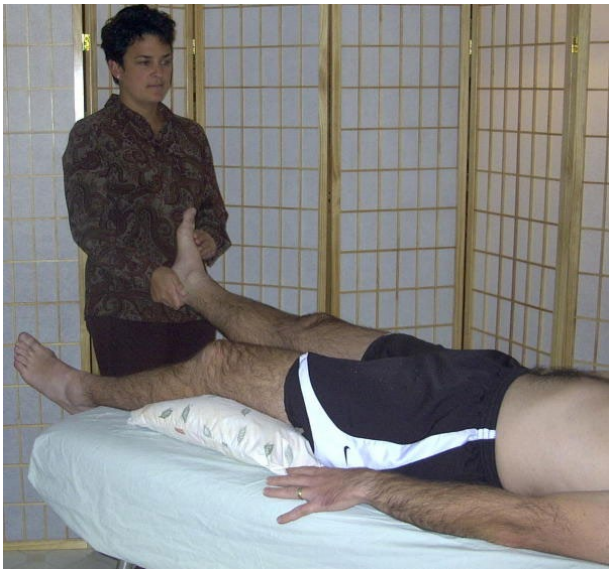


Bilateral Leg Pulls:

Bilateral Leg Pull in Supine for Posterior Fascial Sheath:

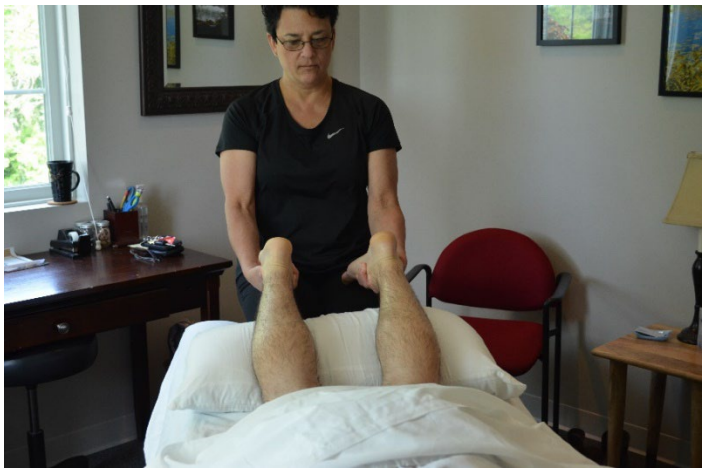
The patient is lying supine with feet off of the end of the table. The therapist cradles the calcaneus bilaterally and leans back just to the point where the end range of tissue is experienced.
A hold is completed as a release occurs through the posterior fascial sheath through the lower extremities and into the Lumbosacral region.
When an Upslip is present the therapist will finish the release by distracting the involved side and "springing" at end range.

For treatment of plantar fasciitis this technique can be followed by releasing the longitudinal arch by placing fists at metatarsal heads on the plantar surface of the foot while holding for a release.



Bilateral Leg Pull in Prone for Anterior Fascial Sheath:

The patient lies prone with feet off of the table.
Therapist cradles the anterior ankles just distal to malleoli bilaterally and leans back just to the point where the end range of tissue is experienced.
A hold is completed as a release occurs through the anterior fascial sheath through the lower extremities and into the abdomen.



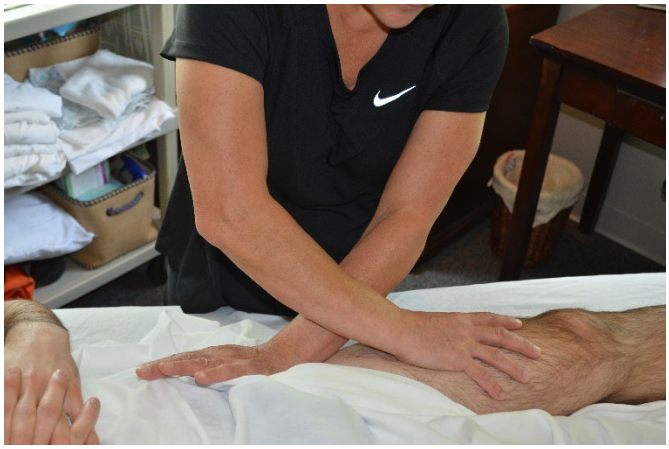
Myofascial Diagonal Pelvic Release:

Patient is positioned in supine.
The side that has the greatest anterior rotation is placed in hip flexion with slight hip abduction.
The side that has the most posterior rotation is extended on the table.
The therapist places one hand on the posterior thigh of the flexed lower extremity and the other hand on the anterior thigh of the extended extremity.
A “cross hand type” release is performed.

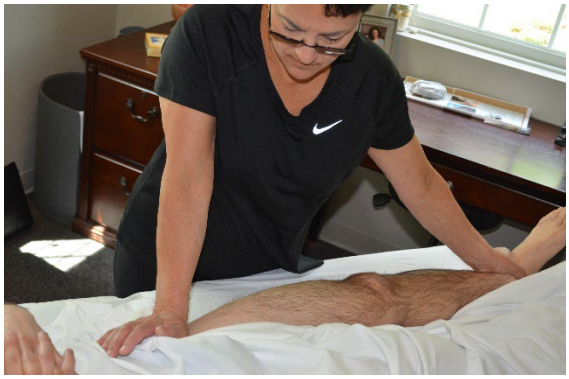
Cross Hand Releases:

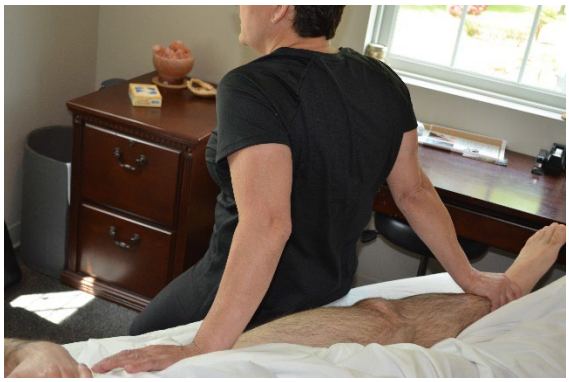
ASIS to Anterior Thigh:

Cross hand technique with one hand on the ilium at the ASIS and one hand on the anterior thigh.



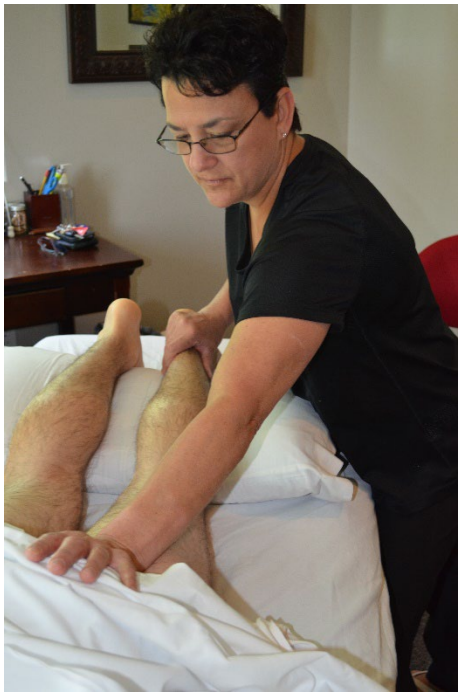
ASIS to Anterior Ankle:
Cross hand technique with one hand on the ilium at the ASIS and one hand on the anterior ankle.

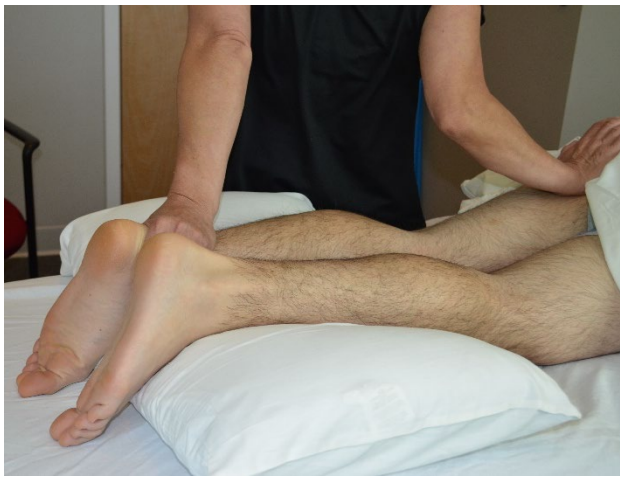




Ischial Tuberosity to Posterior Thigh to Foot:

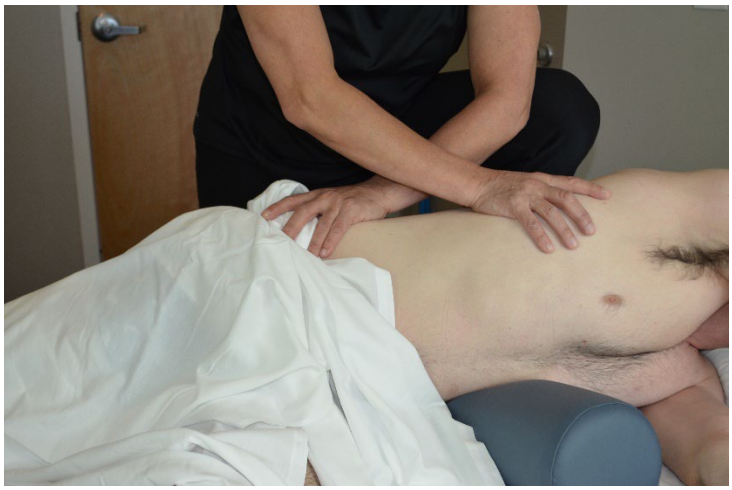
Patient is in prone.
Therapist places one hand on the ischial tuberosity and other hand on posterior thigh to complete cross hand release.
After several releases have taken place, therapist maintains one hand at ischial tuberosity and places other hand on the proximal to the calcaneus for additional releases.





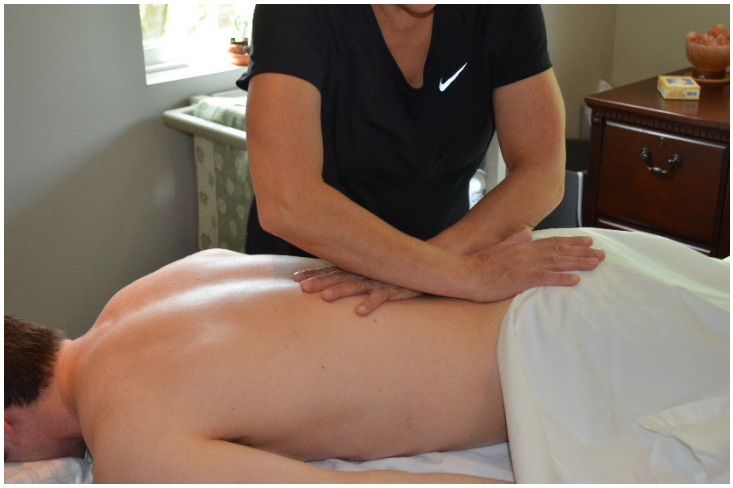
Lateral Trunk Release: With Spring for Upslip

Patient is in side lying.
For maximum stretch patient is positioned at edge of table with therapist bracing patients back with body. Patient drops top leg back over edge of table and reaches top arm up and across to corner of table.
Therapist performs a cross hand release with one hand on distal rib cage and one hand on superior ilium.
If an Upslip is present the therapist performs a "spring" in end range following the release.



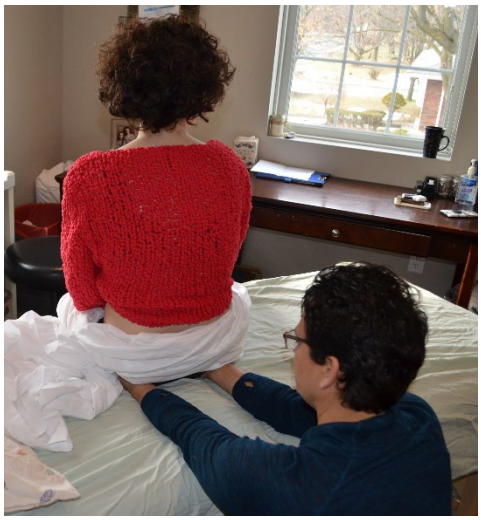
Paraspinal/Lumbosacral Junction Release:

Patient is in prone.
Paraspinal Release: Therapist performs a cross hand technique with hands over paraspinal musculature.
Lumbosacral Junction Release: The same technique can be completed by placing one hand directly on the sacrum and the other hand just above the Lumbosacral junction.



Ischial Tuberosity Release in Sitting: (Lower Pelvic Floor Release)

Patient is sitting on table with feet supported on a stool or chair.
Therapist is positioned behind patient with one hand under each ischial tuberosity.
Therapist completes a "cross hand type" release between the ischial tuberosities.
This technique is useful for pelvic floor pain, hip pain, pubic pain, pain in the coccyx, and when release of piroformis does not significantly change an externally rotated hip posture. (Possibly due to restriction of Obturator Internus m.)
Also used when patient has pain with sitting.



Muscle Energy Techniques:

Correction of an Anterior Pelvic Rotation:

Patient is in supine.
The side that is rotated anterior is placed in hip and knee flexion to comfortable end range.
The patient's opposite side is placed in slight hip and knee flexion with foot on table.
Therapist places body between patient's legs in a supported manner to resist isometric contraction.
Resisted hip extension will occur on the anterior side and resisted hip flexion will occur on the posterior side.
Maintain isometric contraction for 5 seconds and repeat three times. Increase anterior side hip flexion to end range with each repetition.
Follow with an Adductor Squeeze to balance the anterior pelvic ring.

Correction of Posterior Pelvic Rotation:

This is the same as above with a reversed intention.
Patient is in supine.
The side that is rotated anterior is placed in hip and knee flexion to comfortable end range.

The side that is rotated posterior will be in full extension on the table.
Therapist places body between patient's legs in a supported manner to resist isometric contraction.
Resisted hip extension will occur on the anterior side and resisted hip flexion will occur on the posterior side.
Maintain isometric contraction for 5 seconds and repeat three times. Increase anterior side hip flexion to end range with each repetition.
Follow with an Adductor Squeeze to balance the anterior pelvic ring.

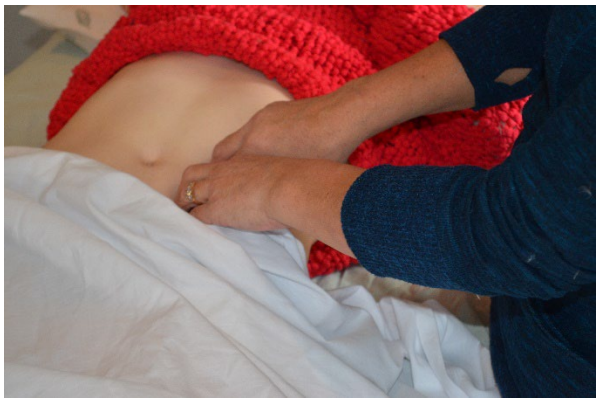
Correction of Upslip/Downslip:

Patient is in supine with feet slightly off of table.
Therapist is at end of table.
Therapist grasps ankle above malleoli on the downslipped side and places a rolled towel on the plantar surface of the foot on the upslipped side.
Therapist asks patient to hike hip on downslipped side and push foot into towel on upslipped side.
Isometric contraction is held for 5 seconds and repeated 3-5 times.
Follow this technique with an Adductor Squeeze.

Adductor Squeeze:
Patient is in supine.
The adductor squeeze is an isometric contraction of the adductors to correct and balance to anterior pelvic ring at the pubic symphysis.
The patient is supine with hips and knees bent and feet on table. Feet are at hip width apart.
The therapist places forearm between the patient's knees and asks them to squeeze into adduction.
This is completed 3-5 times,
As the pelvis balances the force of contraction improves. There is often and audible "pop" sound when the pelvis balances.

Myofascial Mobilizations:

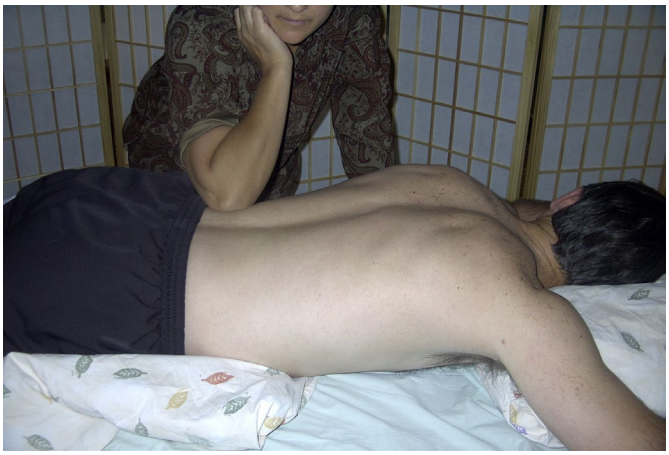
Psoas Release:
Both hands are placed next to each other with fingers pointing downward into abdomen. Finger placement is about 1 1/2-2 inches lateral to the umbilicus. The direction of the release is downward and slightly medial.
Complete this technique in mid-range with hip on table, shortened range with foot on table, and end range with leg extended off table.



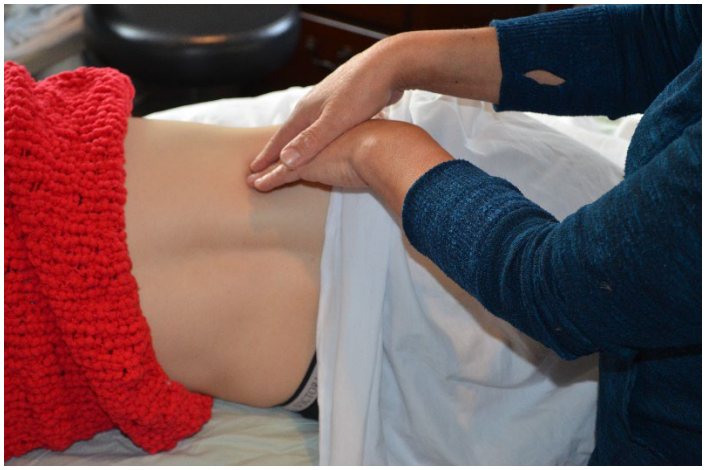
Quadratus Lumborum Release:

Q-L release is performed by placing fingers/elbow over the Q-L region located between the ilium and ribcage lateral to the lumbar transverse processes. The direction of force is downward and medial around and under the lumbar paraspinals.

This technique can also be completed in side lying followed by an end range "spring" in the presence of an upslip.
Complete in midrange with legs on table, shortened range by compressing ilium toward ribs, and end range by extending leg behind body and off table.



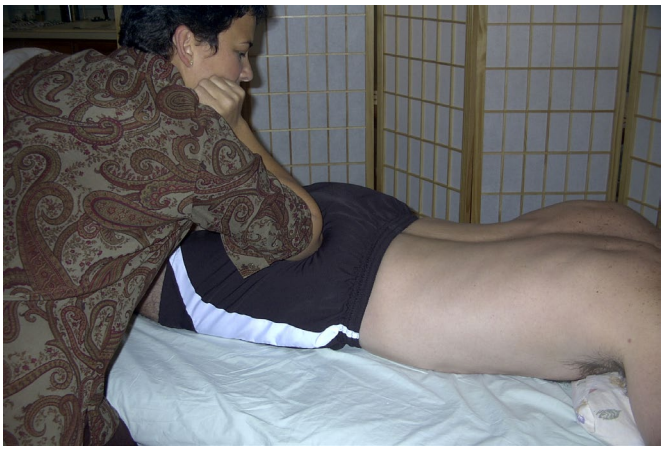
Side lying Method:



Piroformis Release:

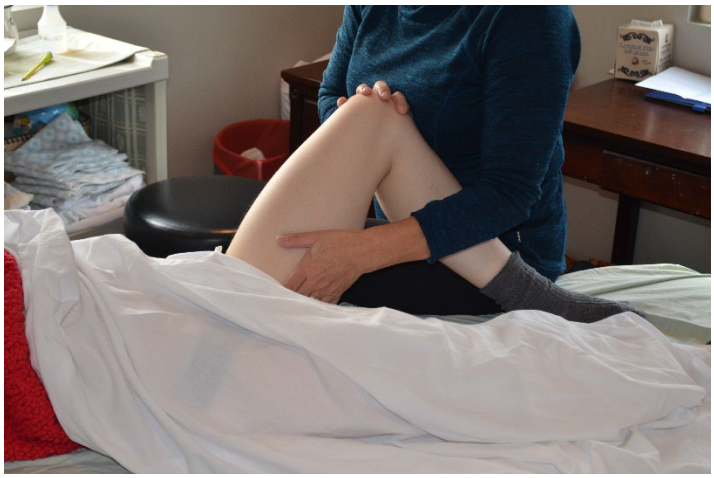
The piroformis release is performed by placing fingers/elbow over piroformis region located between the lateral border of the sacrum and the greater trochanter.
Find the midpoint of the lateral border of the sacrum and visualize a line between this point and the greater trochanter. The pirofrmis can be palpated approximately midway between the sacrum and the greater trochanter.

Complete in midrange with legs on table, shortened range by bending knee and rotating hip into ER, and end range by bending knee and rotating hip into IR.



Adductor (Obturator Ext.) Release:

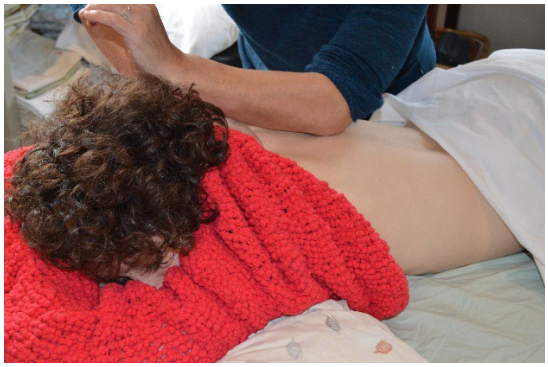
Patient is in supine with hip flexed and in slight external rotation.
Therapist asks patient to isometrically adduct hip to palpate adductor tendons.
Sink fingers into space between holding until a release takes place and following toward the obturator fossa.

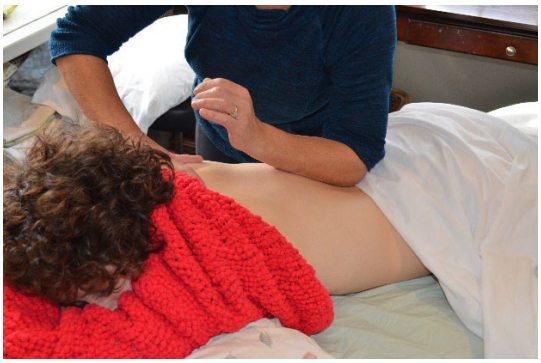


Soft Tissue Mobilizations:

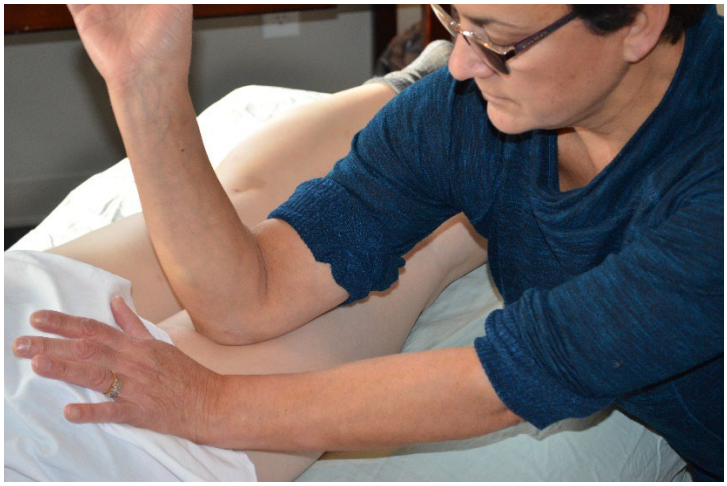
ITB:
Patient is positioned in side lying with the involved lower extremity in adduction and slight extensions off of the table.
Therapist asks patient to adduct into a pillow while applying a vertical stroke down the lateral surface of the thigh along the ITB.
Therapist may choose to stop at points of tenderness and maintain pressure for a release.

Erector Spinae:
This can be completed with patient in prone or in sitting.
Therapist assists patient in isometric contraction into trunk flexion while completing a vertical stroke along erector spinae.
Therapist may choose to stop at points of tenderness and maintain pressure for a release.

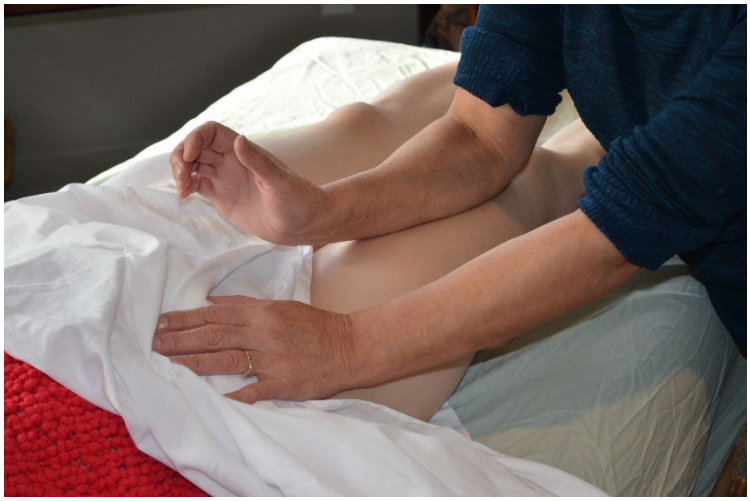




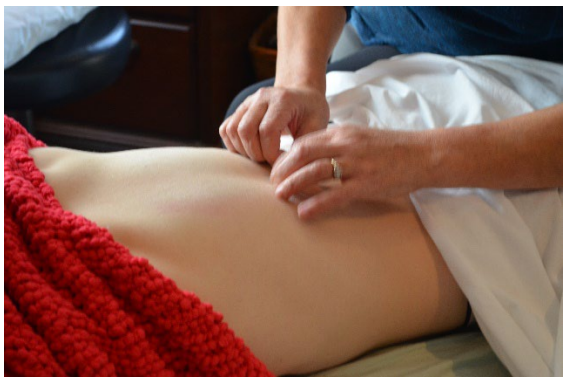
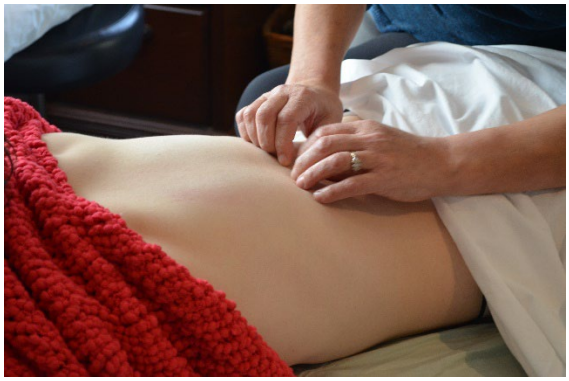
Hamstrings:
Patient is positioned in prone.
Therapist assists patient with isometric contraction of knee extension while completing a vertical stroke along independent hamstring muscle bellies. Avoid pressure over popliteal fossa.
Therapist may choose to stop at points of tenderness and maintain pressure for a release.



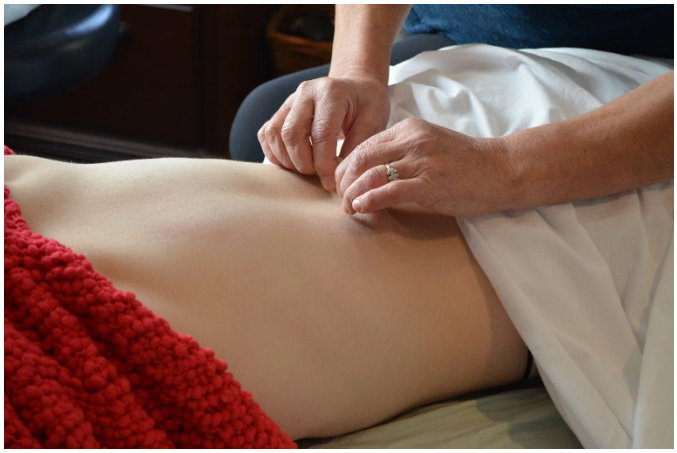
Quadriceps:
Patient is positioned in supine.
Therapist assists patient with isometric contraction of knee flexion while completing a vertical stroke along independent quadriceps muscle bellies. Avoid pressure over patella.
Therapist may choose to stop at points of tenderness and maintain pressure for a release.



Skin Rolling/Fascial Snap:
Patient is positioned in prone.
Skin rolling is applied when tissue is lifted between thumb and first two fingers and 'rolled." A constant traction is applied with the therapist's fingers "walking" through tissue.
When a fascial restriction occurs over a bony area or region of the body where pressure into the body is difficult or contraindicated tissue can be collected and held up into traction for 90-120 seconds while a release takes place.

Fascial snap:
When a specific level of restriction is found during skin rolling, the therapist can apply a "snap" to release this restriction. The therapist lifts the tissue into its end range and then applies a "snap" upwards into traction.
This is a good way to free facet joints in the lumbar region and up to T10 without any compressive forces to the spine. Do not complete this technique above the level of T10 as the facet/fascial orientation does not allow for this type of release to take place and it will be irritating to the patient.



Bibliography and Recommended Reading List

1. Anatomy of Movement
   Calais-Germain, B. Anatomy of Movement. Eastland Press. 1992

2. Anatomy Trains
   Myers, T. Anatomy Trains. Harcourt Publishers Limited. 2001

3. Craniosacral Therapy
   Upledger and Vredevoogd. Eastland Press. 1983

4. Grant's Atlas of Anatomy
   Anderson, J. Williams and Wilkins. Eighth Edition. 1982

5. Healing Ancient Wounds – The Renegade's Wisdom
   Barnes, JB. Rehabilitation Services, Inc. 2000

6. The Endless Web – Fascial Anatomy and Physical Reality
   Schultz, R.L. and Feitis, R. North Atlantic Books. 1996

7. Myofascial Release – The Search for Excellence
   Barnes, JB. JF Barnes and Rehabilitation Services, Inc. 1990.

8. Waking the Tiger – Healing Trauma
   Levine, P. North Atlantic Books. 1997

Additional and updated resources:

1. Fascia in Sports and Movement. Schleip, et al. Handspring Publishing. 2015.

2. The Fascia – Anatomy, Dysfunction and Treatment. Paoletti. Eastland Press. 2006.

3. Fascia – The Tensional Network of the Human Body. Schleip, Findley, Chaitow, Huijing. Elsevier. 2012.

4. Architecture of Human Living Fascia – The Extracellular Matrix of Cells Revealed Through Endoscopy. Guimberteau. Armstrong. Handspring Publishing. 2015.

5. Shift Movement Science: www.shiftmovmentscience.com

Contraindications

Keep in mind that before any treatment is undertaken, a thorough diagnostic workup by a physician should take place in order to rule out any underlying disease process. Furthermore, a comprehensive history and evaluation should precede any treatment.

The following are contraindications listed By Barnes and Upledger in reference to MFR and cranialsacral techniques:

MFR contraindications:

Malignancy
Cellulitis
Febrile state
Systemic or localized infection
Acute circulatory condition
Osteomyelitis
Aneurysm
Obstructive edema
Acute rheumatoid arthritis
Open wounds
Suture
Hematoma
Healing fracture
Osteoporosis or advanced degenerative changes
Anticoagulant therapy
Advanced diabetes
Hypersensitivity of skin

CST Contraindications:

Acute intracranial hemorrhage: may prolong the duration of hemorrhage by interrupting clot formation
Intracranial aneurysm – may induce leak or rupture
Herniation of medulla oblongata – life threatening condition
Recent skull fracture – best avoided: may be with discretion by advanced therapist
Acute systemic infectious conditions – generally avoided however compression and distraction or CV-4 induced “still-point” may help lower fever.