

Functional Mobilization Techniques for the Lower Extremities

****All of the following mobilization techniques are for general mobility of frequent problem areas on athletes, and all of them should ONLY be performed with minimal force. To become more proficient in rehabilitating athletes a more thorough course in movement diagnosis and joint mobilization is recommended. ****

Techniques:

Hip Joint

Distraction/Inferior Glide

- 1) *Direction of mobilization:* Distraction (or Inferior)
- 2) *Reason:* General Joint mobility
- 3) *Setup:* Athlete lying supine near side of table; belt is wrapped around athlete's leg and therapists leg; belt as low as athlete comfort will allow.
- 4) *Force/Action:* In a staggered (lunge) stance take up the slack in the belt and apply a light distraction force; Hold, and have the athlete lightly push into you for a few seconds and then have them relax, as they relax take up the slack and move them into more flexion.



Lateral Glide

- 1) *Direction of mobilization:* Lateral
- 2) *Reason:* General Joint mobility
- 3) *Setup:* Athlete lying supine near side of table; belt is wrapped around athlete's leg and therapists leg; belt as low as athlete comfort will allow.
- 4) *Force/Action:* In a staggered (lunge) stance take up the slack in the belt and apply a light distraction force; Hold, and have the athlete lightly "push knee into me" for a few seconds and then have them relax, as they relax take up the slack and move them into more flexion.



Anterior Glide

- 1) *Direction of mobilization:* Anterior
- 2) *Reason:* Aid in extension and external rotation
- 3) *Setup:* Athlete is lying prone near side of table; cranial hand is placed on athlete's posterior greater trochanter, caudal hand is placed under the distal femur, athlete's knee is bent to 90°
- 4) *Force/Action:* gently raise the distal femur while keeping an anterior force on the posterior aspect of the greater trochanter; have the athlete "pull knee down towards the table" for a few seconds then relax, as they relax take up the slack and repeat.



SI Joint

Posterior rotation of the Ilium

- 1) *Direction of mobilization:* Posterior rotation
- 2) *Reason:* to aid in flexion of hip, general SI mobility
- 3) *Setup:* Athlete is side-lying near side of the table; have the athlete wrap both hands underneath the femur of the other leg to help prevent lumbar spine hyperextension; standing behind the athlete place cranial hand on PSIS and cradle the athletes leg with the caudal hand wrapping around onto distal femur.
- 4) *Force/Action:* gently apply a force in a posterior tilting direction to the PSIS and at the same time gently pulling the femur towards you; have the athlete gently try to flex hip while you resist the motion; have them relax take up the slack and repeat if necessary. **THERE SHOULD NEVER BE ANY PAIN OR DISCOMFORT IN THE LUMBAR SPINE WHILE PERFORMING THIS TECHNIQUE.**
- 5) *Alternative Technique:* In this procedure you will be on the other side of the athlete with your hands in the position shown (cranial on ASIS, caudal on PSIS); this time you will block/brace the athletes leg at the tibia with your body (make sure there knees will be able to tolerate this position) and then have them try to flex hip and extend knee at the same time.

(Technique 1)



(Technique 2)



Sacrum

Sacral Nutation/Anterior Tilting

- 1) *Direction of mobilization:* Nutation/Anterior Tilt
- 2) *Reason:* Aid in extension of the spine and general SI mobility
- 3) *Setup:* Athlete is lying prone near the side of the table with knees flexed past 90° ; heel of cranial hand is on superior poles of sacrum while caudal hand wraps around bilateral distal tibia of athlete
- 4) *Force/Action:* Apply a gentle force to the superior poles of the sacrum while resisting bilateral knee extension of the athlete, hold for a few seconds, then have them relax, take up any slack and repeat if necessary. **THERE SHOULD NEVER BE ANY PAIN OR DISCOMFORT IN THE LUMBAR SPINE WHILE PERFORMING THIS TECHNIQUE.**

