Adductor Strain

Adductor injuries are relatively common, occurring most frequently in soccer players and track & field athletes. Adductor strains are also commonly known as a "pulled groin" or a "groin strain" and occur when one or more of the adductor muscles are stretched past their individual tolerance. Sudden, dynamic movements that require a quick change in direction such as sprinting, jumping, kicking, and forceful twisting or turning can lead to an adductor strain occurring. The diagnosis is based on clinical findings and can be enhanced by imaging such as ultrasound or MRI.

Key Points to Rehabilitation:

- Avoiding activity of provocation until able to tolerate without the return of discomfort or symptoms
- Decrease tone in overused musculature
- Strengthen the adductors as well as complimentary muscle groups to increase tolerance to load and impact

Guiding Principles of Exercise:

<u>Decreasing Muscle Tone:</u>

There are many root causes that can lead to an adductor strain, one of which is due to increased muscle tone. Muscle tone through the adductor group reduces its ability to stretch under quick loads which increases the risk of a strain. Massage, stretching and proper movement patterning of the lower extremity can help to reduce this risk.

Progressive Eccentric Loading of The Adductors

The stronger a muscle group is, the more likely it will be able to tolerate the loads that you put through it. While progressing through strengthening exercises, it is imperative that exercises are performed in the optimal loading zone meaning that we are stressing the tissue enough to make a beneficial change without overloading the muscle or tendon causing injury. Gradual and progressive strengthening will improve the muscle tolerance to load which will allow you to perform daily activities as well as compete in your sport without symptoms.

Gradual Return To Activity:

When reintroducing load, it is important to progress from controlled load to the load of daily activities and eventually to the load that is required to perform your sports or activities. The sport or activities that were the initial cause of the injury are the most difficult to return to and must be gradual and progressively reintroduced. Typically, weekly progressions of 10% can be made without the worsening of symptoms.

Equipment Required:

- Theraband (@G23 Store)
- Foam Roller
- Ball (Pilates, Soccer, Basketball, Volleyball)

Stage 1

Potential Inclusion Criteria:

- Pain through the inside of the thigh
- Mild swelling / Bruising
- Pain that gets worse with activities (Running or Jumping)

Goals:

- Improve tolerance to tissue stretching
- Regain/ maintain full knee and hip ROM

Requirements For Progression:

- 10-14 days of adherence
- Significant decrease in pain/discomfort

Aerobic Exercise:

Avoid Running, Jumping or any exercise that provokes symptoms. You can continue exercise with non-weight bearing activities such as swimming or cycling if tolerated.

1. Hip Abduction Concentric (Band)

Preparation:

- Stand with good posture, feet shoulder width apart
- Hold onto a support for balance if needed

Execution:

- Lift your leg out to the side
- Stop if your trunk starts to lean or bend
- Return to the starting position



Sets: 2-3



Sets: 2-3



Frequency: Daily

Frequency: Daily

Reps: 8-12

Lift leg to side

2. Hip Adduction Isometric

Preparation:

- Lie on your back with your knees bent to 90°, feet flat on the ground
- Position a pillow between your knees

Execution:

Squeeze your knees towards each other, into the pillow



Reps: 8-12

Squeeze knees together

3. Clamshell | Sidelying (Band)

Preparation:

- Lie on your side with your hips at 45° and your knees at 90°
- Band around you knees

Execution:

• Open your top knee up against the resistance of the band



Sets: 2-3

Hips slightly bent, knees bent to 90 degrees

Sets: 2-3



Frequency: Daily

Open knees up like a clamshell

4. Bridge

Preparation:

- Lie on your back with arms resting at your sides, palms up
- Bend hips and knees, placing feet on flat surface
- Pull belly button in

Execution:

- Lift your hips off the surface to make a bridge
- Do not arch your back
- Keep belly button pulled and squeeze glutes during movement
- Lower slowly



Lie on back, arms resting at your side, palms up; Bend hips and knees, place feet on flat surface



Reps: 8-12

Reps: 8-12

Keep belly button pulled and squeeze glutes during movement



Frequency: Daily

Lower slowly back to start position

Helpful Hint

Record your progress in the G23 exercise logbook and bring it to your next appointment as your doctor / physiotherapist will ask for it.

Stage 2

When Can I Start Level 2?

- Completed Level 1 Goals
- Improved tissue tolerance with full knee and hip ROM

Goals:

- Improved tolerance to tissue stretching
- Increased tolerance to light load and strengthening

Aerobic Exercise:

• Avoid Running, Jumping or any exercise that provokes symptoms. Continue exercise with non-weight bearing activities such as swimming or cycling if tolerated.

1. Hip Adductor Stretch

Preparation:

• Sit on the floor, knees wide, soles of feet touching

Execution:

• Gently push knees toward the floor



Frequency: Daily

Frequency: Daily

Sets: 2-3 **Hold:** 20-30 Seconds

Sets: 2-3 **Hold:** 20-30 Seconds

Gently push knees toward the floor

2. Hip Adductor Stretch

both feet flat on the floor

• Begin in the side lunge position as shown

Begin in the side lunge position as snown
Your leg should be out to the side and slightly behind you,

Execution:

Preparation:

 Keeping your back straight, lunge deeper to the side until you feel a stretch along the inside of your leg.



Lunge to side - You should feel a stretch on the inside of your leg

3. Hip Adductor Release (Foam Roller)

Preparation:

- Lie on foam roller as shown
- Position the roll between legs, resting on the inside of one groin

Execution:

· Roll up and down in the groin and thigh area



Duration: 1-5 Minutes

Stop and hold if you find a tender point, let it relax

4. Deadlift | Single Leg + Reach

Preparation:

Stand on one leg

Execution:

- Bend at the hip, keep back leg straight
- Reach as if picking up a golf ball
- Rise up from the hips



Sets: 2-3

Start position

Sets: 2-3



Reps: 8-12

Bend forward, as if picking up a ball

Reps: 8-12



Front view

Frequency: Alternate Days

Frequency: Alternate Days



Frequency: Daily

Knee inline with toes

5. Monster Walk (Band)

Preparation:

- Attach tubing to ankles as shown
- Wide stance, knees and hips slightly bent

Execution:

- Perform a partial squat
- Walk forward, keeping legs wide
- Keep tension on tubing throughout the whole exercise



Wide stance

Sets: 2-3



Walk forward, keeping legs wide

Reps: 8-12 **Frequency:** Alternate Days



Walk wide -Keep tubing under tension

6. Hip Adduction (Band)

Preparation:

• Stand with band around ankle as shown

Execution:

· Bring one foot towards the other



Start Position



Bring one foot towards the other

Stage 3

When Can I Start Level 3?

- Completed Level 2 Goals
- Improved tissue tolerance to light loads

Goals:

• Increase tolerance to load and able to tolerate full weight bearing activities without any pain or symptoms

Aerobic Exercise:

• Return to running or jumping activities as long as there is no pain or symptoms present before or during activity. Continue swimming and cycling.

1. Hip Adductor Stretch

Sets: 2-3

Sets: 2-3

Hold: 20-30 Seconds

Frequency: Alternate Days

Frequency: Alternate Days

Preparation:

· Sit on the floor, knees wide, soles of feet touching

Execution:

Gently push knees toward the floor



Gently push knees toward the floor

Reps: 8-12

2. Hip Adductor Stretch

Begin in the side lunge position as shown

 Your leg should be out to the side and slightly behind you, both feet flat on the floor

Execution:

Preparation:

 Keeping your back straight, lunge deeper to the side until you feel a stretch along the inside of your leg.



Lunge to side - You should feel a stretch on the inside of your leg

3. Hip Adductor Release (Foam Roller)

Preparation:

- Lie on foam roller as shown
- Position the roll between legs, resting on the inside of one groin

Execution:

· Roll up and down in the groin and thigh area



Duration: 1-5 Minutes

Stop and hold if you find a tender point, let it relax

4. Squat | Single Leg + Lateral Slide (Towel)

Preparation:

• Stand with good posture, one foot on a towel

Execution:

- Slide the towel straight to the side
- At the same time, perform a single leg squat on the stance leg
- Keep hip, knee and ankle in line



Sets: 2-3

Start Position

Sets: 2-3



Reps: 8-12

Slide towel straight to the side

Reps: 8-12



Start Position



Frequency: Alternate Days

Frequency: Daily

Keep back leg straight, front knee behind toes

5. Monster Walk (Band)

Preparation:

- · Attach tubing to ankles as shown
- · Wide stance, knees and hips slightly bent

Execution:

- Perform a partial squat
- Walk forward, keeping legs wide
- Keep tension on tubing throughout the whole exercise



Wide stance



Walk forward, keeping legs wide



Frequency: Alternate Days

Walk wide -Keep tubing under tension

Frequency: Alternate Days

6. Bounding

Execution:

- Bend at knees and hip, propel yourself forward onto the opposite leg
- Immediately jump forward onto other foot
- Continue forward



Sets: 2-3

Bend at hips and knees



Reps: 10-15

Bound forward onto opposite leg



Keep going



Return to Activity / Achieving Your #RISEABOVE Goal(s)

Build back into your activity or sport, progressing time or intensity slowly by 10% per week. Be sure to discuss sport specific progressions with a G23 physiotherapist