



# Adductor Tendonopathy Rehabilitation Programme

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- This programme has been developed to enable swelling and discomfort to settle quickly, to promote rapid healing of the injury while maintaining a good level of function
- All exercises should be performed relatively pain-free; if the exercise you are working on is aggravating the problem, then you are most likely doing too much
- The exercises should be performed following the initial post injury phase is complete
  - You should spend 10 to 15 minutes performing strengthening exercises twice a day
  - Perform stretching exercises for 10 minutes; 4 times per day.
  - Perform core stability exercises for 10 minutes; 4 times per day (it is easier to combine these along with stretching).
  - Begin individual exercises by performing about 5-10 repetitions of each and then progress to 20, 30 etc.
- As comfort allows start to include some stationary, low resistance cycling
- When you can perform all of the exercises in each section without discomfort, then you can move onto the next stage

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### **What are the Adductors?**

The Adductors are a group of muscles in your inner thigh/groin that work together to produce flexion, adduction and rotation of the hip. The most commonly injured of which is the Adductor Longus.

### **How do I injure the Adductors?**

Adductor injuries most frequently occur in sports/activities that involve twisting/turning/kicking and sudden changes in direction. These can produce too much strain for the strength of the tendon or muscle which can result in small tears or in some cases complete rupture of the tendon.

Most Adductor injuries settle in response to conservative management using rest from aggravating activities, stretching and strengthening exercises, core stability exercises and non-weight-bearing training. However, in the case of recurrent groin' strains or complete rupture of the tendon, surgery is likely to be required.

### **Stage 1**

#### **Post Injury Phase**

**Day 0 - 5**

- Complete rest from activity is required; protect the limb from the discomfort of full weight bearing with the use of crutches for as long as necessary
- Gradually increase weight bearing as comfort improves
- Ice packs should be applied for 10 – 15 minutes at least four times a day for the first five days following injury
- Avoid any movements which aggravate the discomfort at this stage
- The use of anti-inflammatory medication is helpful in reducing pain and inflammation (always seek the advice of a medical professional before taking prescription medications).

### **Stage 2**

#### **Early Exercise Phase**

**Day 5 – 10**

Perform the following exercises lying on a bed or floor:

- **Static adduction 1** – Place a football between your feet while lying on your back, and squeeze it between your feet. Hold for 30 seconds and repeat 5-10 times
- **Static adduction 2** – Place a football between your knees while lying on your back with your knees bent and your feet on the bed. Squeeze for 30 seconds and repeat 5-10times
- **Core Stability exercise 1 (Transversus abdominus)** – Tighten your tummy and draw your belly button in towards spine without moving your pelvis/spine – Hold while taking 5 breaths and repeat 5-10 times. (Zip and Hollow)

- **Core Stability exercise 2 (Scissors)** – Start in lying position with hips and knees bent and with both feet on the bed/floor. Tighten your tummy and lift one foot off the floor straightening your leg and hold for ten seconds. Repeat with the opposite leg. Perform 3-5 sets.
- **Core Stability exercise 3 (Abdominal sit-up)** – Tighten tummy and do a small sit-up by lifting shoulders off the bed/floor. Perform 3-5 sets of 10 sit-ups
- **Core Stability exercise 4 (Combined Abdominal sit-up)** – Place football between your knees and squeeze gently. As you sit-up lift your feet off the bed to draw your knees and chest towards each other
- **Core Stability exercise 5 (Abdominal)** – From the lying position with legs out straight tighten your tummy and lift both feet one inch above the bed/floor; hold this position for 10 seconds; slowly bring your feet widely apart and hold for 5 seconds; bring feet back together and relax. Repeat 5 sets.

The following exercises can be performed standing e.g. by sink/worktop

- **Balance exercise 1** – Standing on one leg while brushing your teeth. Spend 1 minute on each leg. Perform 2 sets.
- **Balance exercise 2** – Standing on one leg while bending and straightening your other knee. Perform 3 sets of 10
- **Balance exercise 3** – Stand on one leg and allow the other leg to swing gently forwards and back like a pendulum. Repeat 2 sets of 30 seconds, and then repeat with other leg
- **Active hip abduction/adduction (Foot-slides)** – While wearing a sock on a low friction surface e.g. wooden floor, allow a little pressure onto your foot and while maintaining this pressure slide your foot away from you out to the side and then pull back in. Repeat this for 1 minute continuously 5 times and alternate with performing it with your foot pointed 90 degrees from the other (out to the side)

Throughout the day the Transversus Abdominus (tightening your tummy) exercise can be done as often as you remember. Hold for about 10 seconds each time x5/10. You can also do the static adduction exercises in sitting by squeezing your fists between your knees, and you can perform the balance exercises any time you are up standing/waiting

- Begin using an **exercise bicycle** for 10 – 15 minutes of low resistance movements
- A rowing machine can be used with low resistance for gentle hip flexion/extension
- Swimming pool – gentle exercises can begin in the pool after five days (see below)

## Hydrotherapy / Swimming

Day 10 - onwards

Attend the swimming pool every day

- Forward and backward walking
- Hip strengthening exercises in standing –  
Briskly swing your leg forwards and backwards like a pendulum.  
Carefully bring your affected leg out to the side and back to the start position, don't lean to the side.  
Move your leg briskly through the water as this increases the resistance provided by the water.
- Straight leg kick
- Walking on your heels/toes/walking on the spot
- Calf Raises
- Stretching
- Backstroke
- Aqua-jogging
- Breaststroke – when comfortable

## Stage 3

### Intermediate Exercise Stage

Weeks 2 - 4

Bed/Floor

- **Hip abduction and adduction** – Lie on your unaffected side. Lift your affected leg out to the side, up towards the ceiling, and return to start position. Perform 3-5 sets of 10 reps  
Stand holding on to a support; bring your affected leg out to the side as far as possible, hold as long as you can and return slowly to start position. Do not lean to the side.
- **Low-Back extension** – Lay on your front with shoulders a little off the end of the bed. Tighten your tummy and extend your back and raise your shoulders up towards the ceiling. Perform 3-5 sets of 10 repetitions
- Continue abdominal sit-ups
- **Closed chain bridging** – Begin this in lying with hips and knees bent so that your feet or flat on the bed/floor. Tighten in your tummy muscles, squeeze your bottom and raise your bottom and then spine off the bed. Try to keep your pelvis level and aim to get your shoulders, pelvis and knees level. Perform 3-5 sets of 10 repetitions
- **Adductor stretch**
  - **Flexion** - a very important exercise; place the foot on top of the opposite thigh crating a 'figure of 4' shape; gently push the knee down towards the bed/floor and hold for 5 seconds at the limit of stretch; you will have to work through mild stretching discomfort to progress. Repeat 10 times for each leg. Perform at least five sets each day.

- **Extension** – this stretching exercise requires a second person to perform correctly; the second person holds one foot and brings the straight leg gently out to the side to its limit; gently the leg is stretched and held through mild discomfort for 5 seconds. Repeat 10 times for each leg. Perform at least three times a day when possible.

### Standing

- **Hip flexor stretch** – Stand in a lunge position with affected leg behind. Tighten in your tummy and lean forwards so that you get a stretch at the front of your hip. Hold for 15-20 seconds and repeat 3 times
- **Foot slides** with increasing weight through affected leg
- **Active hip abduction/flexion/extension** with ankle weight
- **Cross country skiing on one leg** – Stand on unaffected leg and swing affected leg forward and back while swinging arms in the same rhythm. Perform 3-5 sets for 1 minute and repeat with weight on other leg
- **Adductor stretch**
  - **Extension** – this stretching exercise requires a raised surface such as a desk, bed or chair; stand sideways placing your affected foot on the raised surface; widen both your legs as far as they will go (feeling a stretch in both adductor regions); push the affected leg out a little further feeling increased tightness; holding this position and keeping facing straight ahead, turn the affected foot upwards to point to the ceiling, hold for ten seconds and relax. Repeat 5 times for each leg. Perform at least three times a day when possible.

### Stage 3

### Advanced Exercise Stage

### Weeks 4 - 6

Throughout this stage many of the more challenging exercises and stretches should continue with increased effort and time.

Begin light jogging (remember to warm up and perform stretching prior to and following jogging); initially jogging should be performed for 10 – 15 minutes in a straight line on a firm surface (grass); as confidence increases increase pace and time, then begin to jog in large figure of eights reducing in size gradually.

Slalom, twisting and side to side actions during the running phase should come later and as comfort allows.

Begin to progress through some of these exercises if available:

- Stepper
- Elliptical trainer (if applicable)
- Walking/bouncing/Jogging on mini-trampoline
- Standing on various surfaces e/g carpet/cushion/folded towel
- Side-stepping
- Low impact aerobics
- Multi-directional jumping and hopping
- Landing from a height onto 2 feet then onto 1 foot
- Skipping

Sport specific training can begin at 5 – 6 weeks providing the rehabilitation programme has been completed with no discomfort.

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**For more details on all aspects of care and rehabilitation please refer to the website:**

[www.hipandgroinclinic.ie](http://www.hipandgroinclinic.ie)

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