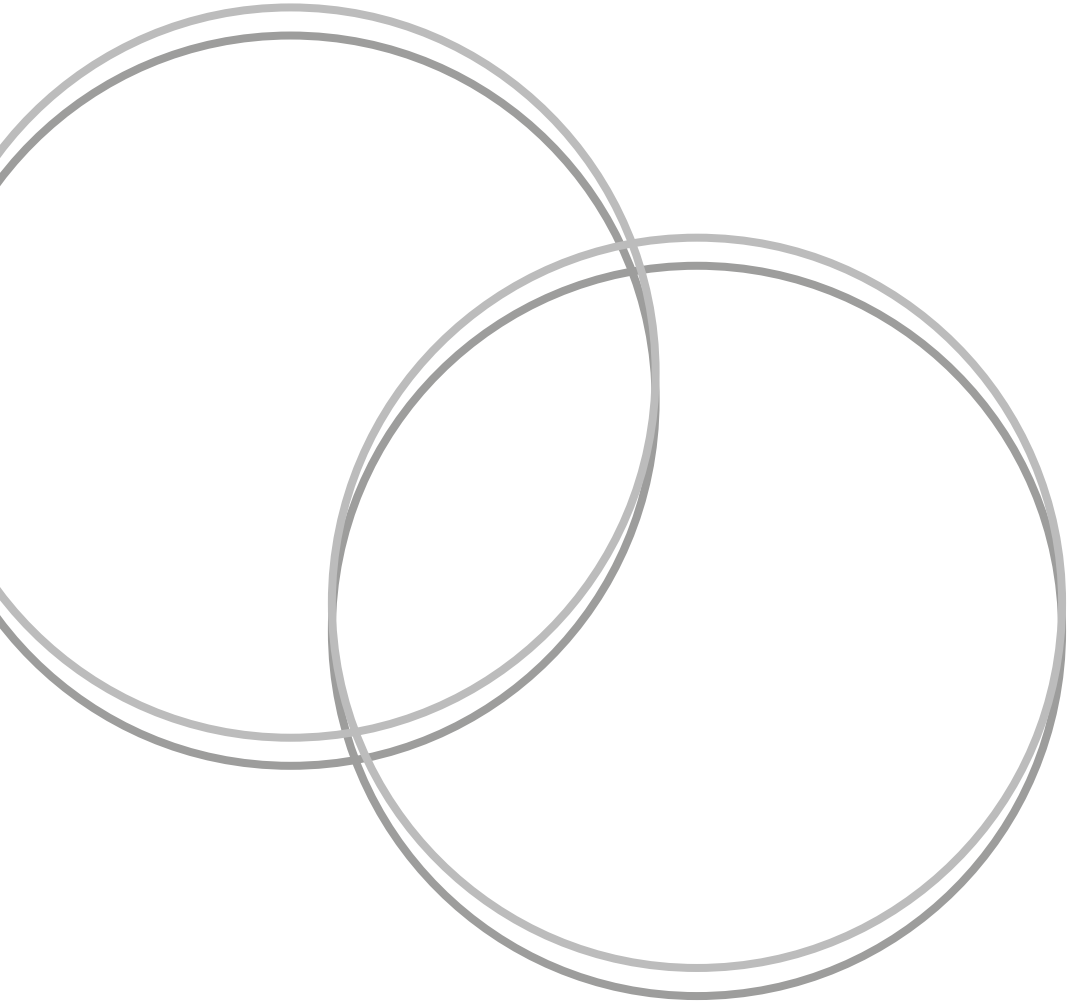
NHS
Oxford University Hospitals
NHS Foundation Trust

Adductor Related Groin Pain

Physiotherapy advice and management



Who is this booklet for?

This booklet has been given to you because you have a diagnosis of adductor related groin pain. The doctor or the physiotherapist will explain the diagnosis and answer any questions that you might have.

What is in the booklet?

This booklet aims to increase your understanding of and help guide you through the treatment for your adductor related groin pain.

It also has details of who you can contact if you need more information or advice.

Please keep this booklet, so that you can refer to it whenever you need to.

Contents of this Booklet

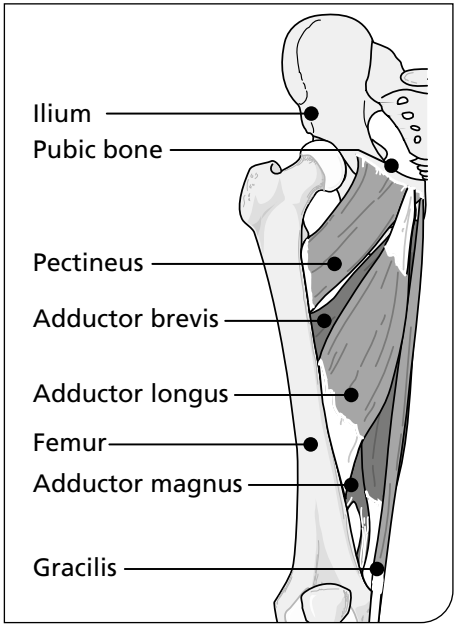
What is adductor related groin pain?

Adductor related groin pain is most common in 16-30 year old males who take part in sports that involve running, kicking and changing directions, such as football. It is an overuse injury that is aggravated by exercise.

The groin is a complex area with many muscle attachments. The adductor muscles and tendons are in the inner thigh. They help support the pelvis and leg when walking.

Adductor related groin pain occurs because the muscles and tendons are overloaded and not working in balance with each other.

Diagram of hip joint muscles



What is the cause?

The cause can be due to many factors including:

- Sudden increases in training intensity or volume
- Reduced hip muscle strength
- An imbalance between the tummy muscles and the inner thigh muscles (adductor muscles)
- Reduced hip range of motion
- Trauma, for example falling into the 'splits' position

What are the signs and symptoms?

Adductor related groin pain can show as:

- Pain in the groin area which tends to improve with effective warm up and gentle activities
- Pain related to specific activities such as running, kicking and changing direction.
- Lower tummy pain on physical activity.

How long will it take to fully recover?

Recovery can vary from person to person depending on the severity of the injury and the duration of symptoms, but some people may take many months to return to their sport.

However, it is possible to do alternative forms of exercise during your recovery, such as rowing or cycling.

What tests are required?

Further tests are not often necessary. A Magnetic Resonance Imaging scan (MRI) may be organised by your GP.

Does this require surgery?

Adductor related groin pain is not treated surgically and is managed through physiotherapy.

How does physiotherapy help?

Physiotherapy helps to:

- Increase muscle strength
- Increase muscle length
- Improve muscle endurance
- Strengthen core stability
- Improve muscle balance between the tummy muscles and the inner thigh muscles.

This physiotherapy exercise programme for adductor related groin pain is in 3 stages.

- Early stage rehabilitation
- Middle stage rehabilitation
- End stage rehabilitation

Your physiotherapist will guide you through each stage of the rehabilitation program.

Progress through the early, middle and end stage rehabilitation exercises as pain, endurance and strength allow.

Pain score

A pain score will help you rate your level of pain during exercise.

The pain score starts at 0 for no pain and goes up to 10. 10 is the worst pain you could imagine. Aim to keep your self-rated pain score no higher than 3 or 4 out of 10 during exercise.

If your pain is above 4 out of 10 when completing any phase of physiotherapy you need to reduce the number of repetitions or return to an earlier stage of the exercises.

It is important that your pain settles quickly when you stop exercising and does not come back later in the day or the next day.

Early stage of rehabilitation

Strengthening

INNER THIGH SQUEEZE

This exercise is for strengthening your inner thigh muscles and should be completed at least twice a day.

Level 1

Lie on your back with your knees bent and your feet on the floor, hip width apart. Arms relaxed by your side

1. Place a medium sized ball between your knees
2. Squeeze the ball between your knees holding for 5 seconds and then relax.

This should be done with equal pressure through both knees.

Repeat as guided by your physiotherapist

Progress onto level 2 when you can comfortably complete this exercise

Level 2

Lie on your back with your knees straight, ankles hip width apart. Arms relaxed by your side

1. Place a medium size ball between your ankles.
2. Squeeze the ball between your ankles for 5 seconds and then relax.
3. Repeat as guided by your physiotherapist

Stretches

ADDUCTOR STRETCH

This is for lengthening the muscles on the inside of your affected thigh.

Stand with your feet apart wider than your shoulders with your feet facing forwards.

1. Bend the knee of your good leg.
2. Keep both feet on the ground facing forwards.
3. You should feel an increase in the stretch on the inner thigh of your affected leg.
4. Hold for 30 seconds to 1 minute.

Repeat the stretch at least twice a day.

Continue to perform this stretch throughout all stages of rehabilitation

HIP FLEXOR STRETCH

This is for lengthening the muscles at the front of your thigh.

Place a pillow on the ground and kneel on it with your affected leg.

1. Place the unaffected leg in front of you so that the foot is flat on the floor and the knee is bent.
2. Bring your pelvis forwards so you take more weight onto the unaffected leg and feel a stretch at the front the affected thigh.
3. You can increase the stretch by placing your arms above your head.

Hold for 30 seconds to 1 minute.

Cardiovascular exercise

You can maintain your fitness during your physiotherapy treatment. You may want to do non-impact exercises during the early stage of rehabilitation. Exercises such as an exercise bike or rowing machine are beneficial at this time.

Core stability exercise

These exercises are to strengthen your tummy muscles

SIT UPS

Lie on your back with your head on a pillow. Bend your knees keeping your feet on the floor with your feet and knees hip-width apart.

Your feet must stay on the floor throughout the exercise.

Place your hands behind your ears.

1. Slowly lift your upper body off the floor towards your knees for 2 to 3 seconds using your tummy muscles. Slowly roll back down to the start position for 2 to 3 seconds.

Repeat as guided by your physiotherapist.

BRIDGING

This is to strengthen your buttock muscles.

Lie on your back with your knees bent and your feet on the ground hip width apart. Arms relaxed by your sides.

Ensure your heels are close to your buttocks.

1. Tighten your tummy and buttock muscles.
2. Flatten your lower back down into the floor.
3. Push your heels into the floor and lift your buttocks off the floor. You should push your pelvis up so that you make a diagonal line from your knees to your shoulder.
4. Hold for 3 seconds.
5. Slowly lower yourself down to the starting position by rolling through your back so your buttocks are the last part of your body to make contact with the floor.
6. Keep your knees in line with your feet.

Repeat as guided by your physiotherapist.

SQUATS

This is to strengthen the muscles in your legs.

Stand with your feet hip distance apart, toes pointing forwards. Keep your back straight and avoid arching your back during the exercise.

1. Bend your knees aiming for your hips and knees to reach a right angle keeping your knees in line with your feet.
2. Keep your heels on the ground.
3. Straighten your legs to return to the starting position.

Repeat as guided by your physiotherapist.

Middle stage rehabilitation

Progress onto these rehabilitation exercises when you are able to complete the early stage.

Strengthening

INNER THIGH STRENGTHENING

This is to strengthen your Inner thigh muscles.

Lie on your affected side. Bend the top leg and place in front of the affected leg with the sole of your foot on the ground.

Keep the affected leg straight in line with your body.

1. Raise the affected leg as far as comfortable off the floor towards the ceiling (about 10 - 15cm) and hold for 5 seconds.
2. Keep your pelvis still.
3. Slowly lower the leg back to the floor.

Repeat as guided by your physiotherapist.

ADDUCTOR SLIDE

This is to strengthen your inner thigh muscles.

You will require a smooth floor to complete this exercise.

Stand and hold onto a secure surface.

Place a cloth or towel onto the floor and place your foot on your affected leg onto the cloth, keeping the other foot on the ground, both feet pointing forwards.

With most of your weight on the unaffected leg, slide the cloth out to the side using the affected leg, as far as comfortable.

1. Pull the affected leg back to the unaffected leg using your inner thigh muscles.

Repeat as guided by your physiotherapist.

FOREARM PLANK

This is to strengthen your tummy muscles.

This exercise should feel difficult, with most effort taking place in your deep tummy muscles.

1. Position yourself on your front, resting on your forearms, elbows level with your side.
2. With your feet hip width apart, tuck your toes under and lift your body from the floor.
3. Ensure your spine stays long and straight. Try to prevent dipping your lower back.
4. Hold for: 30 seconds.
5. Repeat twice.

SIDE PLANK

This is for strengthening your side muscles.

1. Lie on your affected side with your legs straight.
2. Prop yourself up onto your forearm with your elbow under your shoulder.
3. Lift your pelvis off the floor.
4. Your body should be in a straight line, from your feet to your shoulder.
5. Engage your tummy muscles to keep this position.
6. Hold for: 30 seconds.
7. Repeat twice.

SCISSORS

This is to strengthen your tummy muscles.

1. Lie on your back with your knees bent and your back flat against the floor and your feet firmly on the ground.
2. Keep your lower back in contact with the ground.
3. Bring your right leg, bending your hip, up to 90 degrees keeping your knee bent.
4. Lower your right leg back to the ground while bringing your left leg to 90 degrees.
5. Try to keep your back firmly against the floor.
6. Try to prevent any 'bulging' of your tummy muscles or arching upwards of your low back.

Repeat as guided by your physiotherapist.

Stretching

Continue with your adductor and hip flexor stretches.

Cardiovascular

Continue with your cardiovascular exercises. You can continue to cycle and row. If you are pain-free you may use a cross trainer and swim front or back crawl.

End stage rehabilitation

Progress onto these rehabilitation exercises when you are able to complete the middle stage.

Adductor strengthening

This is to strengthen your inner thigh muscles.

1. Lie down on your unaffected side propped up on your elbow.
2. Position a chair by your feet.
3. Place your affected leg on the chair.
4. Use your forearm and the chair to help lift and lower your hips from the chair.
5. Repeat as many as possible until fatigue.

Stretching

Continue the adductor stretches.

Abdominal strengthening

This is to strengthen your tummy muscles.

Gym ball sit up

1. Sit on the edge of a gym ball.
2. Feet firmly on the ground, shoulder width apart.
3. Place your hands behind your ears.
4. Lean backwards using your tummy muscles so that you are lying over the gym ball, keeping feet on the ground at all times.
5. Lift your head and upper body so that you return to a sitting position.

Repeat until your tummy muscles fatigue and you can no longer repeat the movement.

Returning to sport

If you would like to return to sport you may want to break your sport down into specific skills.

For example, if you play football you will need to be able to do the following activities pain free, before you got back to playing a game.

- Run in a straight line
- Sprint over a short distance
- Run and suddenly change direction
- Jump (as if heading a ball)
- Kicking a ball over various distances

Doing other activities to maintain fitness during your rehabilitation

To help maintain your fitness you can vary your exercise and train other parts of your body.

This is termed ‘cross training’ and is a valuable method of reducing injury by distributing the loads placed upon your body.

Here are some examples of cross training that you may find useful:

- Swimming
- Rowing
- Spin classes
- Weight training
- Pilates
- Aerobics
- Circuits
- Gym equipment
- Cycling

Frequently asked questions

How long will it take to get better?

Adductor related groin pain can take months to get better and it is hard to predict how long you will take to respond to this physiotherapy rehabilitation program.

However, it is important that you persevere with the exercises.

When can I go back to my sport?

If you respond well to the physiotherapy rehabilitation program then you should be able to return to your sport.

Returning to your sport is guided by your symptoms and the type of sport you like to do.

We advise a gradual return to your sport. You may have lost conditioning during your injury and recovery, which is why maintaining your cardiovascular fitness through other activities (such as swimming) is important.

Can I still run during my physiotherapy?

There is no evidence that you will do yourself harm if you return to running providing you have little discomfort. Find a level of running which does not aggravate your pain.

If you find changing direction whilst running aggravates your pain, your rehabilitation may take longer.

Will I always have to do my exercise programme?

No. If you find your symptoms returning, then it is advisable to return to your exercise programme.

What happens if my symptoms do not improve?

If this is the case for you, your physiotherapist will see whether there are any alternative treatments we can offer you. They may also refer you back to a doctor for review and discussions of other alternative treatments that may be available.

How to contact us

Nuffield Orthopaedic Centre Physiotherapy Department
Telephone: **01865 738 074**

Horton General Hospital Physiotherapy Department
Telephone: **01295 229 432**

John Radcliffe Hospital Physiotherapy Department
Telephone: **01865 221 540**

If you have any problems or questions at any stage throughout your rehabilitation please do not hesitate to ask your Physiotherapist or Doctor for advice.

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

Authors: Simon Wood and Lindsay Cummings, Senior physiotherapists, Nuffield Orthopaedic Centre

Approved by Oxsport, Nuffield Orthopaedic Centre

June 2022
Review: June 2025
Oxford University Hospitals NHS Foundation Trust
www.ouh.nhs.uk/information

Leaflet reference number: OMI 73885