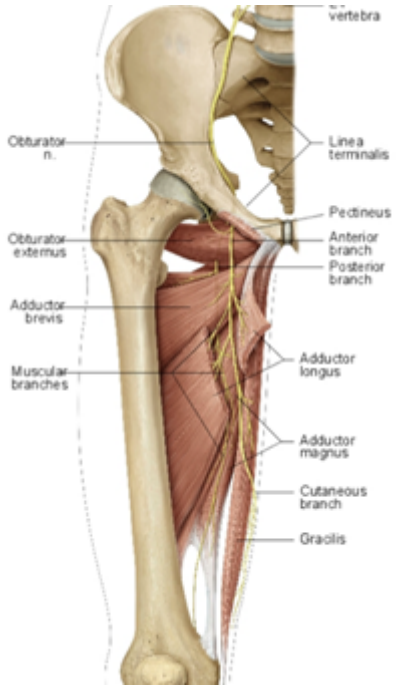
Adductor-related groin pain

Groin pain is a common injury often associated with high levels of sport or physical activity. It is commonly found in athletes that play change of direction sports such as soccer, AFL or hockey. One study showed up to 20% of soccer players will experience groin pain at some point. Groin pain is known for its complex nature due to varied anatomical structures and poor classification of variants of the disorder which causes confusion.

Anatomy

There are many structures and diagnoses that can contribute to the feeling of groin pain, including the hip joint, hip flexor (iliopsoas) tendon, pubic bone, inguinal hernias or certain nerve entrapments to mention a few. This article will focus on groin pain coming from a set of muscles called the adductors, which include the 5 muscles listed below.

These muscles are crucial in controlling the pelvis and will help bring the hip toward the midline in what is called adduction (think kicking a soccer ball with the inside of your foot or stepping off your foot to change directions on the footy field). When the tendon or muscle belly of one or several of these muscles is injured (likely due to overload of the muscle), the athlete may experience pain in the adductor region, or even slightly above the pubic bone. The adductor longus is the most commonly injured of the five.



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Groin muscles:

- Adductor magnus
- Adductor brevis
- Adductor longus
- Pectineus
- Gracilis

Risk factors

There are several factors that may predispose you to developing groin pain over your lifetime. These include:

- Reduced strength in adductors (groin muscles)
- Reduced hip flexibility
- Previous groin-related injury
- A high level of sporting participation (especially within change of direction, kicking and sprinting dominant sports)
- A lower level of sports-specific training
- Altered control of an athlete's trunk muscles

Diagnosis

The diagnosis and treatment of groin pain is difficult because the anatomy of the region is complex, and because two or more injuries often co-exist. However, complex doesn't always have to be complicated. Your physiotherapist can help to accurately diagnose groin pain and differentiate between different sources. Diagnosis of groin pain will include a comprehensive subjective and objective assessment that will include testing muscle strength and flexibility, palpating the area involved and asking a series of questions to help narrow down on the source involved. Adductor-related groin pain will often be painful to palpate and painful when resisting hip adduction.

Imaging can be used to help differentiate between sources of groin pain. Although it is often unnecessary, an X-ray may be commonly used to rule out any skeletal involvement, and an MRI would increase sensitivity of findings and help show injury to soft tissue structures.

Management

Management of groin pain should be multimodal and incorporate a variety of strategies including:

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- An exercise program aimed at improving coordination, flexibility and strength around the stabilising muscles of the pelvis and hip, especially the adductors
- Manual therapy such as massage or dry needling can help to reduce soreness and help to improve return to play times
- Medications may be used initially in order to settle acute pain. Your GP may run through the options with you.
- Preventative sports-specific programs can be implemented in late-stage rehabilitation or even before injury in at-risk sports in order to prevent recurrence. A classic example is the FIFA 11+ injury prevention program (https://www.yrsa.ca/wp-content/uploads/2019/11/pdf/Fifa11/english.pdf)
- If conservative management fails after six months, then further medical options such as an adductor tenotomy may be considered but surgical treatment of acute groin injuries is rare.

In a nutshell

Adductor-related groin pain is a common injury in change of direction, sprinting or kicking sports. Diagnosis can be accurately made by a physiotherapist or sports medicine professional, and management should be centred around building strength and mobility around the pelvis, with a particular focus around the hip adductors. To optimise the return to sport success, a sport-specific program such as the FIFA 11+ or something similar should be performed regularly before participation to reduce the risk of reinjury.

If you are experiencing acute or chronic groin pain, please contact one of the physios at In Balance Physio and Pilates so we can help you get back to doing what you love and become pain-free!

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