

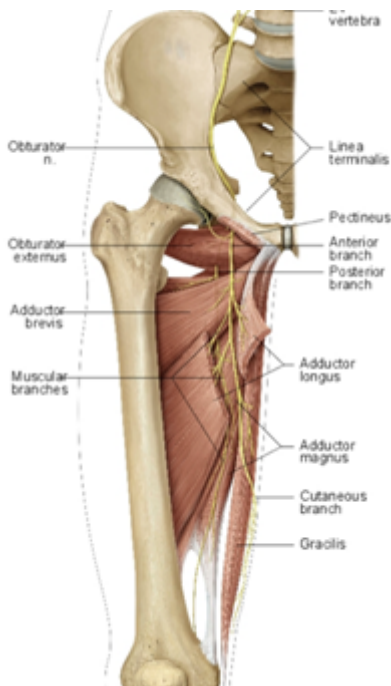
## Adductor-related groin pain

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.



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.

**Article by Kieran Watson**