Groin Injuries

The groin muscles, called the “adductor muscle” group, consist of five muscles that are responsible for stabilising the pelvis and pulling the legs together. They are particularly active during running (especially when changing direction) and kicking. The five adductor muscles consist of the pectineus, adductor brevis and adductor longus (called short adductors), and the gracilis and adductor magnus (long adductors). These muscles originate from the pelvis and insert into the inner aspect of the thigh bone and lower leg bone.

Groin injuries are potentially the most debilitating and frustrating of all, especially in terms of time lost from sport and return to full fitness.

ADDUCTOR TENDINOPATHY

Adductor tendinopathy is a condition characterized by tissue damage and inflammation to the adductor tendon where it attaches into the pelvis, resulting in groin pain. During contraction of the groin muscles, tension is placed through the adductor tendon at its attachment to the pelvis. When this tension is excessive due to too much repetition or high force, damage to the adductor tendon may occur.

Signs and Symptoms of Adductor tendinopathy

- If you have a chronic injury, you may feel a **dull ache** that lasts for long periods
- You may feel **tightness**, **tenderness and/or muscle spasms** when you try to flex, extend or rotate your hip or leg inward
- **Point tenderness** in your adductor muscle may be present
  - You may experience **decreased range of motion** (ROM) in your hip joint
  - You may also feel **tightness in your lower abdominal, spine and hip region**.
- **Weakness** of your adductor muscles can also be experienced as a result of adductor tendinopathy. This along with your other symptoms may make it difficult for you to walk or run and can result in you walking with a **limp**.
- Occasionally, **bruising** (broken blood vessels) in your groin area or over your adductor muscles may appear a few days after your injury. This may be in one spot or may span from your groin to your knees.
- **Warmth, redness and/or a tender lump** may accompany adductor tendinitis and in severe cases swelling may occur.
GROIN STRAIN

When a muscle is strained it is stretched too far. Less severe strains pull the muscle beyond their normal excursion. More severe strains tear the muscle fibers, and can even cause a complete tear of the muscle. Most commonly, groin strains are minor tears of some muscle fibers, but the bulk of the muscle tissue remains intact.

Groin strains are common in sports involving twisting, turning, stepping and kicking, such as all codes of football. They are less commonly injured in straight-line sprinting, with acceleration being the dominant mechanism of injury with this sort of running. Adductor muscle injuries come about because of excessively strong contraction or excessive stretch.

Signs and symptoms

- **Bruising or swelling** (this may occur a few days after the initial injury)
- **A sudden sharp pain in the groin** usually characterised by a definite incident during exercise
- Painful and uncomfortable to walk
- **Tightening** of the groin muscles that may not be present until the following day
- **Inability to contract** the adductor muscles (squeezing the legs together or possibly lifting the leg out in front).
- **Pain when stretching** the muscles.
- **Pain when contracting** the muscles.
- A **lump or gap** in the adductor muscles may be felt.

Physiotherapy Treatment for Groin injuries will involve the following:-

- RICE principles
- Ultrasound and ice
- Acupuncture /Dry Needling
- Massage /soft tissue release
- Stretching
- Core Stability Exercises
- Gait Re-Education and Biomechanical Analysis
- Strengthening program
- Sport-Specific Exercises
- Graded return to sport
- NSAID
- Taping / supportive shorts

Differential Diagnosis

- Osteitis Pubis
- Inguinal/Sports Hernia
- Hip joint pathology
- Lower back pathology
- Nerve entrapment syndrome