The Magic Hands
Sports and Remedial Massage

Phone: 020 8925 7495
Mobile: 07759557625
Email: Michael@themagichands.co.uk
Url: www.themagichands.co.uk

Cycling and Hip Muscle Imbalance

Cycling is a good form of exercise mainly an aerobic activity except uphill (climbing) when it becomes anaerobic. This is beneficial to the heart and lungs which expand and beat faster to transport the extra oxygen around your body. A strong heart and powerful lungs are the basis of good general fitness.
Cycling at approximately 12mph on a flat surface the average person uses 450 Kcal per hour and it is reputed that cycling raises your metabolic rate, so your body continues to burn calories even after exercise.
By cycling only a few miles per day, muscles will become trimmer and toned the main muscles used are gluts, calves, quads, abductors, adductors and hamstrings.

The use of muscles in exercise brings its own set of problems, cyclist and other athletes share a common trait a non-specific lower body dysfunction, a hip (pelvis) muscle imbalance.

The hip has 29 muscles that have their origin and insertions onto it, including some of the most powerful and largest in the body. If some of these muscles are overloaded, tightness may occur and may affect others due to their proximity. The tightness of a muscle when exercising can change the normal mechanics of the hip and this can lead to a muscle imbalance and a loss of function.
Soft tissue work and AIS should be targeted and used on the tight and restricted muscles creating the imbalance.
Some of the symptoms could include lower back pain, knee pain lateral/medial, adductor tightness, hamstrings and gluts tightness.
The common cause of this is overuse or repetitive abuse and poor posture e.g. sitting at a computer or desk for long periods of time the hips will tend to roll backwards the spine will shorten and the hip flexors will lengthens. The hip flexors maintain lower back flexibility and lengthened hip flexors can cause shortening of the hamstrings increasing loading elsewhere in the body.
Falls and accidents, untreated injuries can create overloading and badly setup equipment can impact on biomechanics. The height of a seat on a bike has been linked with insufficiency in aerodynamics, aerobic and injury prevention.

Skeletal muscle can be categorised into two groups phasic or postural based on their function.
The following are involved in soft tissue pelvic conditions.
Postural muscles: Hamstrings, Hip flexors, Erector spinae, Quadratus lumborum, Triceps surae, Piriformis, the short adductors.
Phasic muscles: Tibiales anterior, Gluteus minimus, medius and maximus, Vastas mediales and laterals and the long adductors.

A postural and structural assessment procedure should be carried out to asses any soft tissue restrictions, pelvic anomalies and a treatment plan. Structural differences occur when bones have different lengths, possible reasons surgery, congenital from birth if the difference is 6-7mm or more inserts or orthopaedic shoes could make a correction possible. If asymmetry is present soft tissue therapy AIS, myofascial release, massage etc would make a difference.

The following are tips that could help avoid hip muscle imbalance but will not necessary guarantee it will not develop. Regular soft tissue treatment, stretching such as AIS, professional set up of bike, training within in individuals limits, assessment and treatment of injuries, falls accidents and strength and conditioning work.