

## Mal-alignment Syndrome in Athletes

Do you have one leg longer than another? Feel like your right side of your body isn't coordinated with your left side? Do you have uneven wear patterns on the bottom of your shoes? If you have one or any of these, you may have something called mal-alignment syndrome.

Mal-alignment syndrome is often seen in athletes participating in sports that involve a repetitive movement such as running or one sided activity such as golf or tennis.

Mal-alignment syndrome is recognized by many physiotherapists, chiropractors and athletic therapists. It is a common cause of lower back, hip and leg pain in both the general and athletic populations.

How do you know if you have mal-alignment syndrome? Besides the signs listed above, other clues that you may have mal-alignment syndrome include: persistent foot, leg or low back pain that varies with different activities, curvatures of the spine, asymmetrical muscle bulk or strength or being able to turn your body more in one direction than another. Examples would include a downhill skier who finds it easier to execute a turn to the left than to the right or a hockey player who easily makes a quick stop turning to the left but finds it difficult to attempt the same stop turning to the right.

There are three main findings with mal-alignment syndrome:

- 1) Forward rotation of the pelvis.
- 2) Inward rotation of the pelvis.
- 3) Leg length difference.

The goal of treatment for mal-alignment syndrome is to restore the normal structure and function of the spine and pelvis. This is achieved through:

- 1) Prescribing specific exercises to help certain muscles to relax and certain muscles to strengthen especially muscles of the pelvis and spine.
- 2) Manual therapy such as manipulation and soft tissue therapy to help restore the normal biomechanics of joints.
- 3) Foot orthotics, support belts or compression shorts may also help increase the stability of the pelvis and spine.

As with any health condition or concern, it is recommended that you see your health professional to obtain the proper diagnosis and treatment.

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