

Pelvic Torsion/ Short Leg Syndrome

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Definition

Many runners are affected by this syndrome and might develop muscular imbalances and pain as a result. Having one leg longer than other is similar to driving a car with one car tire longer than the others. One shoe heel will usually wear away more than the other. One foot, ankle, knee, and hip will carry more weight and be under more stress. Eventually compensatory changes take place above the pelvis and the integrity of the spinal column is altered. There are 2 types of short-leg syndrome:

Anatomical Short Leg

The measurement from one-leg bone on one side of the body is longer than the corresponding one. Present in three percent of all short-leg syndromes.

Functional Short Leg:

Cause by Pelvic Misalignments or Foot Pronation

Some common causes are:

1. Flat arches- arches are not the same in both feet
2. A weakness of one or more lower extremity muscles, which allows the pelvis to move forward or backward in relationship to the other side
3. An abnormal range of motion along the lower extremity joints
4. Bad Habits or Posture
5. Poor quality running shoes

Difference from one leg could be minimal or severe. Minimal difference has fewer to no symptoms from it. However, over time this minimal difference becomes greater. In runners, this

becomes a problem because involves a lot of vertical impact. This causes abnormal stress on all muscles, nerves and joints that are involved. The longer the person has this type of short leg syndrome, the greater the chance for a secondary compensatory problem somewhere else in the body, usually in the upper back, knees, hips and feet.

Most common injuries associated with Functional Short Leg Syndrome are:

Heel Spurs
Bunions
Repetitive Ankle Sprains
Runner's Knee (occurs from abnormal patella tracking)
Iliotibial Band Syndrome (outer knee or hip pain)
Shin Splints
Plantar Fasciitis
Hip Pain
Low Back or Neck Pain
Muscular Imbalance

Treatment

Anatomical Short Leg

Correction is made by a heel lift in the shoe of the short leg. Determined by X-Ray examination and chiropractic analysis techniques.

Functional Short leg

Correction is more complex due to determination of underlying cause of the short leg. The process is gradual. It involves specific **stretching** and **strengthening** exercises to address any muscle faults and any muscular imbalances that perpetuate the short leg-syndrome **chiropractic manipulations** to correct structural imbalances of lower extremity joints (pelvis, knee, ankle) and **Custom Functional Orthotics** can be prescribe to correct flat arch problems. Visual observation of the patient running

(Gait or Stride Analysis) is a must to determine if there are any abnormalities.

For more information on this article and to schedule free lower extremity and shoe evaluation call

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or on the web at

www.chirohealthsf.com.