

Sports Performance

by Brett P. Thomas, D.O.

<http://www.osteopathiccenter.org/sportsdir.html>

- [Risk Factors Contributing to Overuse Injuries](#)
- [Treatment for Sports Injuries](#)
- [Young Athletes and Sports Injuries](#)

Risk Factors Contributing to Overuse Injuries In Sports

by Brett P. Thomas, D.O.

Intrinsic (Anatomical)

- Musculoskeletal malalignment
- Musculoskeletal inability
- Inflexibility of muscle
- Muscle weakness

Extrinsic (Training Errors & Equipment Problems)

- Improper training technique or biomechanics
- Changes in training technique
- Changes in training environment or terrain
- Inappropriate equipment or poorly fitted equipment
- Increase in training frequency, intensity or duration

(Note: Osteopathic manipulation is a valuable tool for the prevention and treatment of sports injuries. Ensuring that the body's musculoskeletal system is in proper balance and alignment can prevent injuries. Once an injury has taken place, it is wise to be evaluated and treated osteopathically to quicken healing time, prevent chronic injuries and help the young athletes reach their fullest potential and enjoy all of their sports endeavors.)

Treatment for Sports Injuries

by Brett P. Thomas, D.O.

Osteopathic manipulation is a valuable tool for the prevention and treatment of sports injuries. Ensuring that the body's musculoskeletal system is in proper balance and alignment can prevent injuries. Once an injury has taken place, it is wise to be evaluated and treated osteopathically to quicken healing time, prevent chronic injuries and help young athletes reach their fullest potential and enjoy all of their sports endeavors.

When the athlete, at any age, sustains an injury in a particular area, he/she should remember the RICE-O treatment for injuries!

Rest

Ice

Compression

Elevation

Osteopathic evaluation and treatment

Young Athletes and Sports Injuries

by Brett P. Thomas, D.O.

Osteopathic manipulation is a valuable tool for the prevention and treatment of sports injuries. Ensuring that the body's musculoskeletal system is in proper balance and alignment can prevent injuries. Once an injury has taken place, it is wise to be evaluated and treated osteopathically to reduce healing time, prevent recurrent or chronic injuries and help the young athletes reach their fullest potential and enjoy all of their sports endeavors.

An injury I sustained in high school changed my whole life. I sprained my right ankle severely in an attempt to get a rebound while playing basketball. This was the same ankle that I seemed to sprain one or two times a year. Four weeks later the swelling had disappeared but at times I still had a slight ache. After I was treated several times with osteopathic manipulation the tenderness was gone and I have never sprained that ankle again since! The success of the manipulative treatments I received, led to an interest in osteopathic manipulation and its role in treating athletes.



Chronic joint or muscle pain can develop and affect us in ways that are not always initially realized. When an athlete twists or sprains their ankle it not only affects the ankle but also the foot and leg, the hip, the pelvis, and even the back and head for the body is a dynamic integrated unit of function.

A strain in the tissue called "fascia" which surrounds the muscles usually occurs with a sprained ankle. The fascia can be corrected by proper manipulation. If the fascia tissue is not treated then the area can have decreased blood circulation, ligamentous weakness, decrease range of motion and persistent tenderness.

Even if there is not tenderness in the area of the injury, the ankle sprain could make an athlete susceptible to other injuries such as knee injuries. This is because the remaining twists in the fascia tissue can cause a decrease range of motion of the muscles which then can lead to muscle weakness and/or muscle spasms. Since muscles connect to bones, the muscle spasms or muscle weakness can cause bones of the human body to move out of proper alignment and balance which can lead to other injuries.

An osteopathic physician has the medical training in musculoskeletal diagnosis and treatment which can relieve the strain of the fascia tissue, increase circulation to the area and correct malalignment of the musculoskeletal system.

The prolonged use of muscles caused very small tears in my muscles which led to overuse injuries. Osteopathic manipulation was able to help decrease the inflammation in the area and helped balance the muscle and tissue strains in the area. In my case, the ankle injury led to a shoulder problem because I insisted on playing tennis. I had changed the motion of my tennis serve in order to avoid aggravating my slightly tender ankle. This change in tennis technique lead me to use muscles that were not used to vigorous exercise.

A young athlete involved in collision sports (such as football, snowboarding, soccer) or a young athlete who is involved in a prolonged sports training is more vulnerable to overuse injuries.

Overuse injuries deal repeated microtrauma to soft tissues or bones. The cumulative affects of these very small injuries can lead to stress fractures, Sever's disease (common in soccer and running sports), Osgood-Schlatter disease or Little League elbow (elbow pain and decrease range of motion). Young athletes are more vulnerable because the epiphyseal plate (growth plate) is weaker than the surrounding tissues. The prolonged use of muscles caused very small tears in my muscles thus causing the overuse injuries. Osteopathic manipulation was able to help decrease the inflammation in the area and helped balance the muscle and tissue strains in the area.

Minor injuries can have many prolong affects on the young athlete. There are several things that a person should do to prevent injuries:

- Have an Osteopathic physician diagnose and treat all musculoskeletal abnormalities regularly.
- Stretch muscles before and after exercising.
- Improve sport technique.
- Purchase appropriate athletic equipment. (Make sure it's the right size!)
- Plan a proper training regimen with attention to intensity and duration.
- Exercise opposing muscles.

When the athlete, at any age, sustains an injury in a particular area, he/she should remember the RICE-O treatment for injuries!

Rest

Ice

Compression

Elevation

Osteopathic evaluation and treatment