

Sprains, Strains and Contusions How to Recognize and Prevent the Aches and Pains Most Common to Athletic Play



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By Mark J. Triffon, M.D.

Athletes of all skill levels are bound to suffer some degree of injury during play or even pre- or post game. But, what exactly is your ailment and how should you treat it?

Sprains result when you over stretch or tear your capsule or ligament. Ligaments are tissues that connect bone to bone. The joint capsule is similar to a ligament and surrounds the joint.

Strains, also referred to as pulls, result from over stretching or tearing a muscle or tendon. Tendons are tissues that attach muscles to bones.

Contusions, typically known as bruises, are injuries to your tissue or bone in which the skin is not broken. Blood vessels rupture and bleed into the tissue causing discoloration. Bruises are usually blue or purple at first, and then gradually fade to various shades of brown, yellow and green as they rise to the surface of the skin.

Recognizing the Signs

Sprains and strains have similar symptoms; the difference is in location. Sprains occur along your joint and strains occur along your muscle. Your symptoms increase depending on severity of your injury. Examples include: pain, muscle spasm, muscle weakness, swelling and a pop or crack sensation or sound. Sprains result from trauma, such as when you fall or twist during play, and most often affect your wrist, ankle or knee.

Strains can be acute, such as from an excessive muscle contraction that can occur when you lift weights, or from chronic overuse type repetitive movements or prolonged positions.

Contusions often result when soft tissue is struck hard from a fall or blow.

Applying Treatment

Recommended treatment for sprains and strains depends on the extent of damage done to your muscle, ligament or tendon. For mild injuries, apply the **R.I.C.E** method:

- Rest: Rest the injured muscle, ligament or tendon from painful activity.
- Ice: Apply ice for 15-20 minutes.
- Compression: Wrap the injury starting at the point furthest from the heart with tightness decreasing as you go toward the heart.
- Elevation: Elevate the injured muscle, ligament or tendon above your heart.

Sprains and strains can benefit from rehabilitation exercises and activity modification during recovery. Your healing can improve through specific exercises that restore range of motion strength and normal function.

As with all injuries, early recognition and treatment reduces time lost to play. Stiffness or pain that worsens over three to four days of training is significant. If your condition does not improve, see your athletic trainer or a sports medicine orthopedist to prevent more serious problems.

Preventing Injury

The best way to prevent injury is to warm up and stretch all the muscles involved in the upcoming exercise, activity or work task. A full body warm up, such as jogging or stationary cycling for 5-10 minutes, will increase blood flow and raise the temperature of your large muscle groups. Or, you can warm up by slowly rehearsing the sport, exercise or activity you're about to perform. A light sweat usually indicates that you've warmed up sufficiently and are ready for action!

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