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Activity Health Tip #2: SPRAINS, STRAINS AND CONTUSIONS



SPRAINS

Sprains result from over-stretching or tearing of the joint capsule or ligament. Ligaments are tissues that connect bone to bone. The joint capsule is similar to a ligament and surrounds the joint.

STRAINS

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

CONTUSIONS

Contusions or bruises are an injury to tissue or bone in which the skin is not broken. Blood vessels rupture and bleed into the tissue causing discoloration.

S Y M P T O M S

Sprains and strains have similar signs and symptoms; the difference is in location. Sprains are along the joint and strains are along the muscle. Symptoms will increase depending on the severity of injury. Examples include: pain, muscle spasm, muscle weakness, swelling, and a pop or crack sensation or sound.

Bruises are usually blue or purple at first, then gradually fade to various shades of brown, yellow and green as they rise to the surface of the skin.

C A U S E S

Sprains result from trauma such as falling or twisting and most often affect the ankle, knee or anterior cruciate joints.

Strains can be acute such as from an excessive muscle contraction during lifting or chronic from overuse type repetitive movements or prolonged positions. Strains often affect the back muscles and hamstrings.

Contusions often result when soft tissue is struck hard, as in a fall or blow.

T R E A T M E N T

Treatment for sprains and strains will depend on the extent of damage done to the muscle, ligament or tendon. For mild injuries, use **R.I.C.E.**:

Rest- Rest the injured part from painful activity

Ice- Ice is applied for 15-20 minutes.

Compression- Apply a wrap starting at the point furthest from heart with tightness decreasing as you go toward the heart.

Elevation- Elevation should be above the level of the heart.

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

P R E V E N T I O N

Cold, fatigue and immobilization reduce blood flow and lessen muscle elasticity, increasing the risk of strains. The best prevention is to warm up, and then 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, increases blood flow and raises the temperature of large muscle groups. Or people can warm up by slowly rehearsing the sport, exercise or activity they're about to perform. A light sweat usually indicates they've warmed up sufficiently.

For more information, visit: www.nata.org/industryresources/parentandcoachesguide.pdf

This Activity Health Tip from the National Athletic Trainers' Association is intended to prevent injuries and promote health and safety of physically active people. Certified athletic trainers (ATCs) are medical professionals who specialize in the prevention, assessment, treatment and rehabilitation of injuries and illnesses that occur to athletes and the physically active.

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