Common Volleyball Treatment, Injuries, and Prevention

P.R.I.C.E. Treatment Method

**Definition**

- **P.** Protect – Protect the injury from further harm by using a brace, splint, immobilizer, or ACE bandage.
- **R.** Rest – Rest the injured area by not participating in activities that are painful to perform.
- **I.** Ice – Ice the area for 20 minutes every 2 hours. Never use heat because it increases swelling.
- **C.** Compression – Compress the swelling using an ACE bandage or compression wrap to limit any further swelling. When wrapping the injured area, start at the furthest point away from the body and move toward the body. Be sure that you are not cutting off circulation.
- **E.** Elevate – Elevate the injured area above the heart to pull blood flow away from the injured area.

**Ankle Injuries**

The most common injury in sports is a lateral ankle sprain. This injury occurs in volleyball by rolling the ankle over the outside of the foot. This often occurs when stepping on another player’s foot, landing from a jump, or planting for a sudden change in direction.

**Knee Injuries**

A common injury in volleyball is an anterior cruciate ligament (ACL) sprain or tear, which occurs when the knee is twisted forcefully or hyper-extended. This often occurs when changing direction on court, landing with the leg hyper-extended or colliding with another player. Athletes with a damaged ACL often describe a pop at the time of the injury, followed by a lot of swelling within a few hours.

**Achilles/Patellar Tendonitis**

Achilles/Patellar Tendonitis is inflammation, irritation, and swelling of the Achilles tendon caused by the constant jumping and landing involved in volleyball. Symptoms usually include pain in the heel/knee when walking or running. The tendon is usually painful to touch and the skin over the tendon may be swollen and warm.

**Rotator Cuff Tear**

Swinging and hitting place stress on the rotator muscles of the shoulder joint. These muscles help hold the shoulder in place as well as raise your arm in the air. With repetitive overhead shoulder activities (such as throwing, hitting, and swinging), these muscles can develop little tears by rubbing against the bone they are located under. This injury can range from slight tears with no pain to full tears with severe pain and loss of motion. Seek immediate medical care if the collar bone appears deformed or if the athlete indicates the shoulder is out of socket.

**Lower Back Pain**

The lower back is a common source of chronic pain among volleyball players. The cause of most lower back pain is related to muscle and ligament strain. The pain is usually resolved with rest, physical therapy, or orthopedic treatment.

For more information, or to contact one of our Sports Medicine Outreach Liaisons, email us at SportsMedicine@amitahealth.org or call us at 847.385.7120 or 708.245.6051

AMITAhealth.org/SportsMedicine
The AMITA Health Orthopedics Institute is a national leader in musculoskeletal care, offering comprehensive and advanced care for a wide range of conditions. We are proactive about keeping you active. That is why our multi-disciplinary orthopedic teams enlist a comprehensive leading edge approach to the prevention, assessment, treatment and rehabilitation of musculoskeletal injuries.

Our team of highly-experienced board-certified physicians, surgeons, therapists and nurses are dedicated to providing patients of all ages with a personalized treatment program that is customized for your condition, lifestyle and personal preferences.

We work hard to prevent sports-related injuries, which have become increasingly more common among athletes, especially children. AMITA Health Sports Medicine Outreach Liaisons keep kids active and participating in the extracurricular activities they enjoy by delivering educational programs and support for parents, coaches and athletes that focus on injury prevention, proper technique and overall athletic care.

Sprains
A sprain is an injury to a ligament, the tough, fibrous tissue that connects bones to other bones. Ligament injuries involve a stretching or a tearing of this tissue. A sprain typically occurs when people fall and land on an outstretched arm, land on the side of their foot, or twist a knee with the foot planted firmly on the ground. This results in an overstretch or tear of the ligament(s) supporting that joint. The usual signs and symptoms of a muscle sprain include pain, swelling, bruising, and the loss of functional ability. Sometimes people feel a pop or tear when the injury happens. However, these signs and symptoms can vary in intensity, depending on the severity of the sprain.

Strains
A strain is an injury to either a muscle or a tendon, the tissue that connects muscles to bones. Depending on the severity of the injury, a strain may be a simple overstretch of the muscle or tendon, or it can result in a partial or complete tear. A strain is caused by twisting or pulling a muscle or tendon. Strains can be acute or chronic. An acute strain is caused by trauma or an injury such as a blow to the body; it can also be caused by improperly lifting heavy objects or overstressing the muscles. Chronic strains are usually the result of prolonged, repetitive movement of the muscles and tendons.

Prevention

Training & Conditioning
Proper conditioning, technique and flexibility may reduce the risk of non-contact injuries. Proper resistance training increases strength in the lower back, core, shoulders, and ankle stability. Pay close attention to correct technique.

Warming Up
Warm up muscles with dynamic stretching prior to practice, workout, or match. An effective warm-up increases both your heart rate and your respiratory rate.

Stretching
Stretch only after having warmed up; a cold muscle is more likely to tear when stretched. Stretching after a workout increases flexibility and reduces stress on joints. Perform stretches slowly, holding each position for at least five seconds.

Nutrition
Proper nutrition before and during your workout will help you maintain blood sugar levels and keep you adequately hydrated for peak performance. Drink plenty of fluids. A doctor or physical therapist can assist you in developing a proper strength, flexibility and nutrition plan.

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