Common Dance 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.

Common Injuries

Ankle Injuries
The most common injury in dance is a lateral ankle sprain. This injury occurs by rolling the ankle over the outside of the foot when landing from a jump or falling out of a turn. A lateral ankle sprain causes damage to the ligaments just below the bone on the outside of the ankle. In some cases, a pop is felt or heard by the athlete. Mild sprains require rest, but not necessarily medical treatment (follow P.R.I.C.E. method). Injuries with persistent swelling, pain or any deformity should be seen by a doctor.

Hip Injuries
Overuse hip injuries occur when there are repetitive stresses and trauma caused to a specific area of the hip. These injuries will often go unnoticed by the athlete for an extended amount of time before eventually becoming debilitating. Two examples of hip overuse injuries are:

• Snapping hip syndrome is a condition often seen in dancers. Dancing requires a great amount of hip motion and repetitive movements, which can lead to muscular imbalances and a snapping in the hip that can be both audible and painful. Symptoms can include a snap or pop that can be heard, pain, swelling, loss of flexibility, and loss of motion.

Rest, ice and stretching are used to initially treat snapping hip syndrome. If symptoms persist after P.R.I.C.E. treatment, it is important to contact a sports medicine doctor.

• Femoral neck stress fracture is an overuse injury that affects the top part of the thigh bone that leads to the ball portion of the hip joint. This fracture occurs over time, unlike a standard fracture. These injuries are often seen in dancers that begin intense training after a long period of inactivity. Femoral neck stress fractures can be caused by internal factors (Nutrition, Muscle imbalance, Foot mechanics, Foot mechanics, etc.).

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and Flexibility) and external factors (Increasing training too quickly, Hard running surface, Steep incline, and Excessive training).

The symptoms of a femoral neck stress fracture generally start out as vague groin pain that increases over time. The pain will begin to increase with activity. Eventually, the pain may focus more onto a specific point, hurt at night and cause increased discomfort when the hip is flexed forward.

A dancer with these symptoms should be evaluated by a sports medicine doctor to determine a treatment plan.

**Knee Injuries**

Another injury seen in dancing is an anterior cruciate ligament (ACL) sprain or tear, which occurs when the knee is twisted forcefully or hyperextended. This often happens when landing from a jump or planting awkwardly. Dancers with damaged ACL often describe a pop at the time of injury that may be followed by a significant amount of swelling within a few hours.

Athletes should see their primary care physician or a sports medicine doctor if pain and/or swelling persist after P.R.I.C.E. treatment. In addition, bone maturity in younger athletes helps to determine the treatment plan. Injury to an open growth plate may require special consideration by a pediatric orthopedic specialist. Training in proper jumping and landing technique may help to prevent this injury.

Knee pain that comes on slowly over time can indicate other problems, such as:

- **Patello-femoral Pain Syndrome** (runner’s knee) – pain in the front of the knee related to muscle and tissue stress around the knee cap. This can be addressed with proper training in physical therapy.
- **Osteochondritis Dissecans** – a defect in the knee’s cartilage that can become evident over time during repetitive activity such as jumping.
- **Osgood-Schlatter Disease** – stress-related inflammation in a growth center at the front of the knee.

**Back Pain**

Dancing puts a lot of demand on an athlete’s back due to repetitive maneuvers that require hyperextension of the back and changes of direction. Some injuries to the back occur suddenly and are commonly known as back strain. Others occur more gradually, especially if the body doesn’t have time to recover properly.

Over time, repeated hyperextension of the low back can cause:

- **Spondylolysis** – a stress fracture of the bones in the lower spine or lumbar vertebrae.
- **Spondylolisthesis** – the lumbar vertebrae slip forward, if an athlete with a stress fracture continues to participate in the sport. This is much more serious and can lead to continued pain that may require treatment.

Therefore, it is important that dancers experiencing low back pain be restricted from activity until evaluated by their primary care physician or a sports medicine specialist.