Common Tennis Injuries

Tennis is one of the most common sports around the world, and is considered one of the 'lifetime sports' in which individuals of all ages and skill levels participate. It is a great way to maintain physical activity at any age, and has been shown to improve overall cardiovascular health, fine motor control, hand-eye coordination and balance.

Injuries in tennis players are relatively common regardless of skill level or age. Approximately two-thirds of injuries are caused by overuse, while the remainder are due to traumatic injuries from an acute event. This indicates, that with proper training and technique, the vast majority of injuries in tennis are preventable.

What injuries are most common in tennis? And how can they be prevented?

Lateral Epicondylitis

Also known as 'tennis elbow', lateral epicondylitis is one of the most common injuries in tennis and many other sports and careers. It is due to persistent use of the muscles of wrist extension, which bend the wrist backward, without proper rest or playing technique. These muscles are used significantly when the tennis ball contacts the racquet, especially during a backhand stroke. Symptoms often include pain localized to the outer aspect of the elbow where the muscle tendons of the forearm insert into bone.

Lateral epicondylitis can be prevented with focused strengthening of the wrist extensor muscles, along with proper warm-up routines and periods of rest. It is also important to have proper racquet grip size and technique to prevent the development of this condition. Players that use a one-handed backhand may need to switch to a two-handed technique.

Shoulder Injuries

Injuries and pain in the shoulder in tennis are most often due to weakness of the rotator cuff muscles and poor conditioning. The rotator cuff is a set of muscles that surround the shoulder joint, helping to move and rotate the arm. The rotator cuff is an essential component of the shoulder, helping to position the humerus properly in the shoulder socket. When the muscles are fatigued, or partially torn, they weaken and allow for increased movement and 'play' of the ball and socket shoulder joint, causing irritation to the surrounding tissues. This can lead to inflamed bursa or tendons which result in pain and swelling. Most players notice pain with overhead movements, especially with serving and high volleys. Sometimes the irritation persists and can limit daily activities and interfere with sleep.

Prevention of rotator cuff injuries can be accomplished by changing technique of overhead movements, such as contacting an overhead ball slightly in front of the body rather than directly above or behind. Performing light resistance exercises with an exercise band by flexing and extending the forearm may help decrease the pain and occurrence of shoulder injuries.

Stress Fractures

Stress fractures are small cracks in bones that cause pain, rather than the more obvious acute fracture associated with a broken or displaced bone. Stress fractures are typically the result of rapid increases in training without proper rest. As the muscles fatigue, more and more force is placed on the bone. Sometimes bones cannot adjust quick enough to handle the increased requirements, leading to a stress fracture. This tends to occur in children and adolescents at nearly three times the rate of professional players. Some common areas of stress fractures include the foot, involving the metatarsals or navicular, and bones of the lower leg, the tibia or fibula.

Stress fractures are preventable with appropriate endurance and strength training, as well as proper rest time prior to extensive play time. Properly fitted footwear is also essential to preventing this common overuse injury.

Strains and Sprains

Joint sprains and muscle strains are usually due to rapid and sudden movements. Muscle strains can result in a spasm of the muscle, leading to pain and decreased movement. Joint sprains occur when the joint is quickly moved out of its usual range of motion. A common joint sprain in tennis is an ankle sprain, caused by a 'rolling' of the ankle out of its physiologic range of motion leading to one or more ligaments being stretched or partially torn. Stretching appropriately is very important to prevent muscle strains. Stretches should be done slowly and deliberately, while avoiding bouncing into the stretch. Dynamic stretches are also useful and involve moving a body part during stretching, such as swinging the leg forward and backward or swinging arms in circles and across the body. Combining strengthening programs with proper stretching, along with well-fitted footwear, can also help prevent joint sprains.

As with any sport, remember to be stretch and warm up before extensive play. Be careful on the courts, and speak with a sports medicine professional or healthcare provider for any concerns about an injury.

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