

Correct Tennis Elbow with Stroke Changes

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The most effective treatment for tennis elbow, and other micro-trauma oriented injuries, require the correction of bony misalignments along with the release and strengthening of supporting muscles. But to produce a long-term change, the correction of the underlying faulty techniques that led to the condition's onset must be addressed. With tennis elbow, the major error is usually the smaller less powerful forearm muscles being forced to accomplish a job best done by the more powerful shoulder muscles. This creates a high injury potential as well as poor sports performance.

In lateral tennis elbow, the overload occurs at the forearm extensors, mainly extensor and radialis brevis. This occurs most commonly with a backhand stroke that's hit with improper technique. The key to correct the problem is to keep the elbow firm in an almost fully extended position during the stroke. The motion and power will come from body weight transfer and shoulder motion. In a faulty stroke, the elbow is bent, the body is leaning back, and the racket motion comes from the elbow straightening, thereby asking the forearm extensors to carry the load.

Medial tennis elbow occurs at the origin of the forearm flexors, especially the pronator and radial risk flexors. Techniques using wrist snap and forearm pronation, such as a forehand stroke that is hit late, use the wrist to compensate. Leaning back while stroking also tends to cause this problem. In addition, techniques which over stretch the medial elbow, i.e., a powerful serve, can also cause the problem. The technique that would correct this problem, would be a forward weight transfer in the forehand stroke with the wrist straight and firm and contacting the ball when the weight is on the forward foot.

In baseball, pitching or throwing with a snap can also cause this problem. Little leaguers' elbow is a similar problem to medial tennis elbow, however, the open growth plate in children is even more vulnerable than the soft tissue attachments, making this a more challenging situation.

Another problem that commonly occurs with tennis is ulnar wrist sprain. Tennis instruction often advises players to "lay their wrist back" on the forehand stroke to get more power. The hyperextended wrist does not absorb the shock well. Also players often believe that top spin is obtained by wrist roll. Forward elevation is the key and wrist roll only serves to strain the wrist. Wrist snap in serving can also contribute to this problem.

When elbow and wrist problems occur, the first step is to eliminate the particular activity and control the acute inflammatory stage with any of the many possible techniques and modalities we use in chiropractic. The challenge then becomes how to bring about permanent restoration, especially when anxious athletes, weekend or otherwise, are impatient to return to their sport.

The key lies in a sufficient rest period, evaluating and correcting the technique problems, counterforce bracing, (i.e., wrist or elbow supports), releasing overcontractions in forearm extensors and or flexors, correction of bony misalignments, and an effective flexibility and strength rehabilitation program.

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