

The Optimal Program for Rehab of Elbow Tendon Injury

Overhead athletes (e.g., tennis players, javelin throwers, baseball pitchers, volleyball players) can lose significant function of the arm after an elbow tendon injury. Physical Therapists are often in charge of getting these players back to full force in hitting, pitching, serving, and spiking.

But what is the optimal rehabilitation program for athletes who injure their elbows? In this article, an expert in sport rehabilitation and research addresses the current recommendations for treatment of elbow tendon injury. The basic idea presented is that Physical Therapists must first know the specific pathologic process going on in the injured tendon. And second, it is equally important to understand the healing mechanism occurring throughout the rehab process.

To accomplish step one (recognize and diagnose elbow injury), it involves an examination of the entire arm (upper extremity), baseline X-rays, and specific clinical tests applied to the arm. For example, it's not enough to just measure the available elbow range of motion. The Physical Therapist must evaluate individual motions of the shoulder, scapula (shoulder blade), and wrist. It's not unusual for athletes to lose motion in one direction while gaining motion in another. Asymmetries (differences in strength and motion from one arm to the other) can create significant problems in stability and mobility.

There may be ligamentous laxity (looseness) in the elbow joint that put increased stress on the nearby muscle tendons that are trying to compensate. When the muscle/tendon unit has to do the job of the ligament (to stabilize the joint), it can't do its own job (move the arm). Eventually, other problems will develop as the body adapts but loses optimal function.

The Physical Therapist views each athlete as a total person -- not just the elbow or the arm. The clinical evaluation takes into consideration other structures and injuries (or compensations) in other areas of the body. The therapist must determine what phase of injury and healing the player is in and provide treatment that 1) protects function, 2) restores strength, and when appropriate, 3) returns the player back to full sports activity.

The author provides detailed instructions in how to accomplish these three goals in treatment. Specific applications of exercise for elbow tendon rehabilitation are described with photos of athletes demonstrating exercise concepts. Before returning an athlete to activity, it is advised that strength and motion on the injured side equal the other arm. Athletic equipment such as tennis racquets and golf clubs must be inspected and modified. The author gives instructions for both.

The goals of Physical Therapy in the rehabilitation of tendon injuries are to restore strength, endurance, and flexibility. Failure to eliminate pain while restoring function through conservative (nonoperative) efforts may result in the need for surgery, postoperative rehab, and ultimately, further delays in return-to-sport.

Reference: Todd S. Ellenbecker, DPT, MS, SCS, OCS, CSCS, et al. Current Concepts in Examination and Treatment of Elbow Tendon Injury. In *Sports Health*. March/April 2013. Vol. 5. No. 2. Pp. 186-194.

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