Non-Operative Treatment of Ulnar Collateral Ligament Sprain of a Collegiate Baseball Player

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**Background:** A 21-year-old male collegiate baseball catcher sustained an injury to the medial aspect of his right elbow while throwing. The athlete denied any feelings of elbow instability, or hearing or feeling a pop. Objective findings included mild swelling over the medial epicondyle and tenderness to palpation over the flexor-pronator musculature and anterior bundle of the ulnar collateral ligament (UCL). Valgus stress tests were positive for laxity. Manual muscle testing of the flexor carpi ulnaris was graded as 3/5, eliciting pain and weakness. **Differential Diagnosis:** Signs and symptoms were consistent with a right elbow UCL sprain and flexor-pronator mass strain. **Treatment:** The physician’s findings included flexor carpi ulnaris weakness and pain with manual muscle testing, and valgus stress tests were positive for laxity. MRI revealed a partial tear of the UCL of the elbow, resulting in a final diagnosis of a 2º UCL sprain. Initial treatment consisted of rest, ice and compression to control pain and decrease inflammation. Two days post injury; treatment consisted of moist heat pack, ultrasound/electrical-stimulation combination therapy, massage and ice. At the one-week follow-up, the athlete stated there was no real change, but no longer had pain while putting on his backpack. Twelve days post injury; upper body ergometer (UBE) and wrist flexion/extension, radial/ulnar deviation, and pronation/supination strengthening exercise were added to his rehabilitation program and he was allowed to play as the designated hitter (DH). Thirty-three days post injury, signs and symptoms had subsided and he began a progressive interval-throwing program (ITP). Forty-nine days post injury; the athlete felt close to preinjury status, had full range of motion and strength, but still had signs and symptoms of inflammation. As a result, the physician decided to inject the medial aspect of his elbow with cortisone, and the athlete’s only treatment consisted of icing. Fifty-three days post injury; the athlete returned to his ITP and reported a decrease in pain while throwing. Fifty-six days post injury; the athlete had full strength and pain-free range of motion, no increased laxity of the UCL, and was allowed to return to play catcher. For the remainder of the season, the athlete continued strengthening exercises and treatment to control pain as needed. **Uniqueness:** Wilk et al. (2004) stated that a typical return-to-throwing with conservative treatment of a UCL sprain is between 12 and 14 weeks. Signs and symptoms indicated that this athlete tolerated the accelerated progression compared to published norms. We have no speculation as to why this athlete tolerated the seemingly accelerated progression. **Conclusions:** This athlete sustained a partial UCL tear of his right elbow and responded well to conservative treatment; beginning an ITP approximately 5 weeks post injury and returning to competition 8 weeks post injury. Signs and symptom throughout the rehabilitation process indicated he was tolerating the rehabilitation program. Upon having full and pain free strength and ROM, and no UCL laxity, a cortisone injection was administered to help with inflammation. The athlete had a full return to play, completed the season through the College World Series and is now on active duty in the Navy. Although published norms are helpful guidelines for treatment and rehabilitation programs, this case report stresses the importance of monitoring the patient’s signs and symptoms as indicators of how they are tolerating program. **Relevant Evidence:** Rettig et al. (2001) stated that 42% of throwing athletes who had signs and symptoms of UCL tear or insufficiency and were treated non-operatively, which included a minimum of three months rest with rehabilitation exercise, returned to their previous level of competition. Of those that did return, they did so at an average of 24.5 weeks after diagnosis. **Word Count:** 600