

“Ulnar Collateral Ligament Reconstruction of the Elbow in Overhead Athletes: Results of Over 1,100 Cases”

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Background:

The UCL is the main medial stabilizer of the elbow. The anterior bundle is the primary structure involved in overhead sports. Between May 1988 and December 2005, 1,117 UCL reconstructions and 18 repairs were performed by the senior author (JRA).

Study Design:

Restrospective cohort study.

Methods:

Follow-up physical exam and/or questionnaire data were collected at a minimum two years from surgery on 742 patients at average of 35 months after UCL reconstruction. Seven hundred ten (96%) were baseball players, including 301 (41%) who played professional baseball, 88 at the major league level. Surgery was performed using a modification of the Jobe technique to place an autologous Palmaris longus or gracilis tendon graft through drill holes in the medial epicondyle and ulna. Ulnar nerve transposition was performed in all cases. Excision of a posteromedial olecranon osteophyte was performed in 180 (24%) patients.

Results:

84% of reconstructions and 70% of repairs were able to return to the same level of competition or higher at an average of 11.4 months. 81 (11%) patients had a complication including transient ulnar nerve paresthesias and superficial wound problems. Five patients had late (6-18 months) medial epicondyle avulsions.

Conclusions:

Ulnar collateral ligament reconstruction yields more favorable results (84%) than UCL repair (70%). Good or excellent results can be expected in athletes at all skill levels. A complication rate of approximately 10% can be expected. Return to competition requires approximately one year.