

Outcomes after Elbow Ulnar Collateral Ligament Reconstruction with the Docking Plus Technique in 163 Athletes

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Abstract

Background: This retrospective case series examined 163 athletes who underwent ulnar collateral ligament (UCL) reconstruction (UCLR) from 2015-2018. All cases were by a single surgeon at a high volume center using the Docking Plus Technique. We previously reported outcomes in 324 athletes from 2005-2014 with 88% of patients reporting a Conway score of good or excellent.

Purpose/Hypothesis: The purpose of this study was to determine if patients undergoing UCLR with the docking plus technique are able to return to sport and to better characterize the athletes needing this procedure. Our hypothesis was that our cohort would largely be able to return to their previous level of play and be mostly college level pitchers.

Methods: Patients who underwent UCLR at our institution from 2015-2018 were identified and surveyed. We were able to reach a total of 163 patients and they were asked for background demographic information and information about their athletic careers before and after UCLR.

Results: Our results were largely similar to our previously study with 94.5% of athletes obtaining Conway scores of Good or Excellent. 95% of athletes were male, 91% played baseball, and 83% of baseball players were pitchers. 59% of athletes were in college at the time of their surgery. For 8 athletes, this was a revision procedure, 7 of the revisions were for pitchers. 5 of the 7 pitchers were able to get back to the same level or higher of competition. 98.8% of patients surveyed said they were "satisfied with the outcome of the surgery."

Conclusions: The Docking Plus Technique performed by a single surgeon at a private practice setting leads to reproducible return to play and patient satisfaction. The prototypical patient undergoing UCLR is a high level male baseball pitcher. UCL outcomes data would benefit from more prospective studies and the creation of a nationwide UCLR database to draw conclusions about technique, graft type, risk factors, and many more relevant variables.

Full Text

This preprint is available for download as a PDF.

Figures



Figure 1

Primary Position of Baseball Players Undergoing UCLR



Figure 2

Level of Play at Time of Surgery



Figure 3

Injury Presentation



Figure 4

UCL Reconstruction by Year 2006-2019