Outcomes after Elbow Ulnar Collateral Ligament Reconstruction with the Docking Plus Technique in 162 Athletes (129)

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Objectives: This retrospective case series examined 162 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. 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 162 patients by telephone for a survey. They were surveyed for subjective and objective outcomes and for background demographic information including information about their athletic careers before and after UCLR.

Results: Of our 162 respondents, 150 (93%) returned to the same level of play or higher (excellent on Conway classification). 9 did not return to competitive play (6%) while 3 returned to a lower level of play. 5 of those who did not return to competitive play had their surgery senior year of college. Most athletes were in college at the time of surgery (61%), followed by high school (32%). 2 athletes were in middle school, the rest were playing professionally. Baseball pitchers comprised the majority of our respondents (75%). Catchers were 9% of respondents and infielders/outfielders were 3% each. Other athletes participated in cheerleading, lacrosse, track, volleyball, gymnastics, wrestling, and football, though these were far less common. The mean and median ages of survey respondents was 19 (12-31). 61% described an acute “pop” leading to their elbow pain while 39% endorses no acute event but chronic elbow pain leading to presentation. Of the 61% presenting with an acute rupture, 40% endorsed an “acute on chronic,” presentation. 58% of baseball players played more than just baseball in high school while 41% had specialized in just baseball. The average return to competitive play was 12 months, with a range of 4-24. The range for pitchers was 9-24 with an average of around

Conclusions: Overall, our results mirror those of previous studies. 93% of our patients returned to the same level of competition or higher after undergoing UCLR with the docking plus technique. Most of those who did not return were college seniors who graduated. Our typical patient was a college baseball pitcher around 19 years old. Return to play with our set rehab protocol was around 1 year, though faster for non-pitchers. The docking plus technique provides reliable treatment for chronic or acute UCL tears in athletes.

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