EP.03.183

OUTCOMES OF BICEPS TENODESIS VARIATIONS WITH CONCOMITANT ROTATOR CUFF REPAIR: A MULTICENTER DATABASE ANALYSIS

<u>K. Hao</u>¹, D. Hagan², J. King², R. Srinivasan², T. Wright², M. Moser², K. Farmer², J. Wright², M. Pazik², R. Roach² ¹ College Of Medicine, University Of Florida, Gainesville, USA

² Department Of Orthopaedic Surgery & Sports Medicine, University Of Florida, Gainesville, USA

Background: Studies to date comparing biceps tenodesis methods in the setting of concomitant rotator cuff repair (RCR) have demonstrated relatively equivalent pain and functional outcomes. The purpose of this study was to compare biceps tenodesis constructs, locations, and techniques in patients undergoing rotator cuff repair using a large multicenter database.

Methods: A retrospective cohort study was performed using the Arthrex Surgical Outcomes Systems (SOS) database to compare pain and functional outcome scores in patients undergoing biceps tenodesis in the setting of concomitant rotator cuff repair. A global outcomes database was queried for patients who underwent biceps tenodesis with RCR for medium and large sized tears (1-5cm). Patients >=18 years with minimum 1-year follow-up were included. The ASES, SANE, VAS, and VR-12 scores were compared at 1- and 2-year follow-up based on construct (anchor, screw, suture), location (subpectoral, suprapectoral, top of groove), and technique (inlay, onlay).

Results: Improvement in VR-12 Mental Score favored anchor and suture fixation at 1 year (P=.042) and onlay tenodesis technique at 2-year follow-up (P=.029). No additional tenodesis comparisons demonstrated statistical significance. The proportion of patients with improvement exceeding the MCID did not differ based on tenodesis methods for any outcome score assessed at 1- or 2-year follow-up.

Conclusions: Biceps tenodesis with concomitant rotator cuff repair for medium and large tears leads to improved outcomes regardless of tenodesis fixation construct, location, or technique. A clear optimal tenodesis method remains to be determined and the decision should be left to the surgeon and patient.