

## Retrospective Comparative Analysis of Elbow Arthroscopy Used to Treat Primary Osteoarthritis with and Without Release of the Posterior Band of the Medial Collateral Ligament

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### Summary:

We suggest that the additional release of the posterior band of the medial collateral ligament be performed judiciously because this procedure did not influence elbow joint range of motion in our patients with primary osteoarthritis.

### Abstract:

**Purpose:** To evaluate the clinical and functional outcomes of arthroscopic debridement arthroplasty with release of the posterior band of the medial collateral ligament in patients with primary osteoarthritis.

**Methods:** We evaluated 43 patients treated with arthroscopic debridement arthroplasty for elbow osteoarthritis from February 2006 to February 2014. In group A (n=19), the posterior band of the medial collateral ligament was released, and in group B (n=24), it was not released. Mean follow-up period in groups A and B were 55.4 months (range, 24-100 months) and 62.2 months (range, 24-103 months), respectively. Clinical results were evaluated by measuring preoperative and postoperative range of motion (ROM) of the elbow, Visual Analogue Scale (VAS) score, and Mayo Elbow Performance Score (MEPS).

**Results:** Both groups showed significant improvement in clinical outcome (VAS and MEPS) at final follow-up compared to preoperative evaluation (Group A, P=0.009 and 0.013, respectively; Group B, P=0.015 and 0.008, respectively). Group A showed significant improvement in increased flexion at the 6 months follow-up (P=0.043). However, there was no statistically significant difference in postoperative ROM and clinical results between the two groups at the final follow up (P=0.482).

**Conclusion:** Arthroscopic debridement arthroplasty with release of the posterior band of the medial collateral ligament was associated with improved flexion at the 6-month postoperative follow-up, but no significant difference between the groups was observed at final follow-up. Therefore, the additional release of the posterior band of the medial collateral ligament is unnecessary for improving of postoperative range of motion.