

**Is It Necessary to Repair the Medial Collateral Ligament for the “Triple Triad” of the Elbow Joint?*****Zhe Song***

**Purpose:** To date, it is still controversial whether surgical approach to the medial collateral ligament (MCL) should be performed or not. Therefore, the purpose of this study was to investigate the (1) range of motion; (2) clinical scores using the Disabilities of the Arm, Shoulder and Hand (DASH) and the Broberg-Morrey questionnaires; and (3) rate of arthritic changes, heterotopic ossification (HO), or elbow instability postoperatively in patients whose terrible triad injuries of the elbow included MCL injuries that were treated without repair or reconstruction.

**Methods:** 34 patients who underwent surgery with a minimum 24-month follow-up (mean, 29.2 months) were reviewed. Based on the systematic treatment protocol, radial head fracture, lateral collateral ligament, and coracoid fracture were treated. Subsequently, torn MCL was repaired in 14 patients, whereas in the remaining 20 patients, the MCL was treated by using the adjustable brace without surgical fixation. Range of motion, clinical scores using the DASH and Broberg-Morrey questionnaires, and rate of arthritic changes, HO, or elbow instability postoperatively were assessed periodically.

**Results:** At final follow-up, no significant differences were found in range of elbow motion, clinical scores of the DASH and Broberg-Morrey questionnaires, and elbow instability between these 2 groups with and without MCL repair—except the pronation and supination, which had superior range in repair group. In contrast, radiologic findings such as the rate of arthritic changes and HO were seen more frequently in patients without MCL repair than those with surgical repair.

**Conclusion:** Our results indicate the effect of MCL repair on elbow motion and function might be small, whereas osteoarthritic changes and HO occurred more frequently in elbows without MCL repair.