

## البحث الثامن

### **Evaluation of shoulder function after open surgical repair of full-thickness rotator cuff tears.**

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#### **Aim of the study:**

The purpose of this study was to evaluate the functional outcome of patients after an open minimally invasive approach for repairing rotator cuff tears

#### **Method:**

From January 2017 to January 2019, a prospective study was conducted on forty patients with full-thickness rotator cuff tears. Preoperative data collected included: demographic data, cause of tear, level of activity, active and passive range of motion. Patients were evaluated using the shoulder index of the American Shoulder and Elbow Society Score (ASES) and University of California Los Angeles (UCLA) score 1-year post-operative and compared to pre-operative scores to assess the degree of improvement. Final score correlation with age, symptoms duration before the operation, size, and type of tear were studied.

#### **Result:**

This study included 25 males and 15 females with a mean age of  $45.58 \pm 14.38$  years. Rotator cuff tear was traumatic in 23 patients (57.5%) and degenerative in 17 cases (42.5%). The mean modified ASES score showed significant improvement from  $32.20 \pm 9.70$  to  $85.58 \pm 14.17$  with  $p$ -value = 0.001. According to the UCLA score, 33 patients (80%) had an excellent and good score, 5 patients (12.5%) had a fair score and 2 patients (0.5%) had a poor score value. The mean UCLA score improved significantly from  $10.98 \pm 3.42$  to  $30.55 \pm 4.85$ ; with  $p$  value=0.001. Final results were proved statistically to be significantly better in younger patients, traumatic tears, small-sized tears, and early operative intervention.

#### **Conclusion:**

Open rotator cuff repair is an easy and effective method for treating rotator cuff tears as it provides pain relief with improvement of range of motion and shoulder function. This approach can be considered as a backup option when arthroscopic instrumentation devices are not feasible.