

## **Clinical and radiological comparison of two techniques for biceps tenodesis : Open subpectoral biceps tenodesis versus arthroscopic proximal biceps tenodesis**

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**INTRODUCTION:** The study was aimed to compare open subpectoral biceps tenodesis and arthroscopic proximal biceps tenodesis in repair of small or medium rotator cuff tears.

**METHODS:** 100 consecutive patients (50 open subpectoral tenodesis, group A; 50 arthroscopic proximal biceps tenodesis technique, group B) who underwent biceps tenodesis were evaluated retrospectively. The surgery time and residual pain, popeye deformity were compared between the two groups. The mean age at the time of operation was 46.3 years in group A (range, 41-58 years) and 51.9 years in group

B (range, 45-61 years). Postoperative magnetic resonance images were evaluated in 100 patients to determine the integrity of the tenodesis and the location of the tenodesis tunnel.

**RESULTS:**

At the most recent follow-up, the UCLA score in group A improved from a preoperative mean of  $15.2 \pm 4.1$  to  $30.8 \pm 3.9$  ( $P < .001$ ). In group B, these scores improved from  $16.3 \pm 4.2$  to  $30.4 \pm 3.2$  ( $P < .001$ ). There were no statistically significant differences between the 2 groups ( $P = .43$  for UCLA). Popeye deformity was detected in 2 cases of group A (4%) and in 4 cases of group B (8%) ( $P = .14$ ). In postoperative MRI analysis, There were no statistically significant differences between the 2 groups distal migration of biceps tendon.

**DISCUSSION AND CONCLUSION:** For the treatment of LHBT lesions, both open subpectoral tenodesis and arthroscopic proximal biceps tenodesis technique showed good clinical outcomes. But, open distal subpectoral tenodesis had the additional advantage of shorter surgery time, less residual pain and encouraging early results compared to arthroscopic proximal tenodesis. There was no significant difference in the overall incidence of Popeye deformity between the 2 groups.